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MENTAL
SUGGESTION.

BY

DR. J. OCHOROWICZ.

PART I.

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HYPNOTISM:

BY FREDRIK BJÖRNSTRÖM, M. D.

Authorized Translation from the Second Swedish Edition.

By BARON NILS POSSE, M. G.,

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To define the real nature of hypnotism is as difficult as to explain the philosophy of toxic or therapeutic action of medicine—more so, indeed. None the less, however, does it behoove the practitioner to understand what it does, even if he cannot tell just what it is, or how it operates. Dr. Björnström's book aims to give a general review of the entire subject.

—Medical Record.

THE HUMBOLDT LIBRARY OF SCIENCE.

MENTAL SUGGESTION

PART I.

MENTAL SUGGESTION

BY

DR. J. OCHOROWICZ

SOMETIME PROFESSOR EXTRAORDINARIUS OF PSYCHOLOGY AND NATURE-PHILOSOPHY
IN THE UNIVERSITY OF LEMBERG

WITH A PREFACE BY
CHARLES RICHET

TRANSLATED FROM THE FRENCH BY
J. FITZGERALD, M. A.



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PREFACE.

THIS book, the title of which will, perhaps, scare those who fear novelty, is not a work of imagination, but of experience. A multitude of facts are set forth herein, that have been observed as well by the author himself as by sundry experimenters. It is a collection of facts, and nowhere else can you find brought together so many data. But it is not enough to accumulate facts—the facts must be rightly observed. In this respect Mr. Ochorowicz's criticism of the facts he has witnessed, or that he cites from the accounts given by other scientific men, is as rigorous as is called for by a subject so difficult. The most notable thing in his work is the resolute, unflagging determination to weigh all objections, to put away all causes of bad faith, whether conscious or unconscious, to take note of the difficulties of the problem, sometimes magnifying them, and not to be content till every possible cause of illusion has been removed.

The task was difficult, and it is much to have attempted it under conditions so stringent.

To demonstrate mental suggestion it suffices to eliminate two causes of error :

First, the error due to fraud. And when I say fraud, I do not mean willful deception plotted, contrived, studied beforehand—that is very rare ; but unconscious, automatic fraud (so to speak) produced by the natural tendency that is in all of us to wish to make an experiment successful when once we have taken it in hand. Hence, we must first of all make sure that no involuntary indication can have been given; in other words, that there has been no word or gesture or touch that could lead the person that answers to give preferably such or such response.

The second cause of error is chance. Chance often brings about amazing coincidences. Now, mathematical certitude is never attainable in cases where chance may play a part ; nevertheless, there is a moral certitude resulting from the continuous success of many experiments, the probability of any one of which is weak.

Mr. Ochorowicz has sought to eliminate these various difficulties ; he finds a certain number of cases which he regards as conclusi

and I think I may say that he is pretty exacting in the matter of proofs. In consequence of certain decisive experiments he has reached a conviction, and naturally he strives to make his readers share it with him.

And yet I do not think that his book, strong as it is in proofs, will convince all, or even many persons. I know too well (from my own experience) how difficult it is *to believe what we have seen* when it does not accord with the general tenor of our thoughts, with the common-places that underlie all our knowledge. A fortnight ago I witnessed such or such an astonishing fact, and I was convinced. To-day I toss my head and begin to doubt. Six months hence I shall no longer believe it at all. This is a curious anomaly of our mind. To produce conviction, it is not enough that a fact is proven logically and experimentally; it is necessary, furthermore, that we, so to speak, become intellectually habituated to it. If it clashes with our routine, it is rejected, spurned.

This is what is commonly called "common sense." Common sense it is that makes us reject all new and unexpected thoughts; that regulates our conduct and governs our opinions.

And yet this much-lauded "common sense" is little better than a routine of the intelligence. To-day's common sense is not the common sense of a couple of hundred years ago, or of a couple of thousand years ago. A couple of thousand years ago it was common sense to believe that the sun revolves round the earth and at even sinks into the ocean. A couple of hundred years ago it was common sense that one cannot in one day send a message to Pekin and receive an answer; but to-day common sense says that one can send a telegram thither, answer prepaid. To-day common sense commands that an army of a million soldiers be maintained, with five million muskets. Two or three centuries hence will not this common sense seem astounding absurdity?

Hence, if mental suggestion is opposed in the name of common sense, the common sense of the present year is meant, for the common sense of ten years hence will have quite other tendencies. It is only a question of time, and I dare say that after a few years this idea, having made its way into people's minds, will be found quite matter-of-course. People will, perhaps, even marvel that we should have found so much difficulty in accepting it. Do we not see the immortal discoveries of our great Pasteur, though proved by a superabundance of demonstrative experiments, nevertheless meeting an astonishing amount of opposition? What stronger evidence is needed of our incurable routine?

Not that I consider mental suggestion as rigorously proven once for all. Certainly not. Strictly demonstrative experiments are rare. In general, when they are conclusive (by concordance of results) they

are not irreproachable in other respects ; and when they are irreproachable, they are not conclusive. But some there are that are at once irreproachable and conclusive ; they will be found set forth in this book, and the reader will be able to judge of their importance.

After the facts, the theories. Of these there are many, but to me they do not seem to be of any great importance. The essential thing is to establish this fact, that *independently of any phenomenon appreciable by our normal senses, or by our normal perspicacity, how quick soever it may be supposed to be, there exists between the thought of two individuals a correlation such as chance cannot account for.*

The demonstration of this proposition is, to my thinking, the fundamental point. And though Mr. Ochorowicz and others before him have amassed proofs, these do not produce absolute, complete conviction, but only doubt : so strong in its action upon our ideas is the influence of routine and of habit.

But whatever the opinion ultimately formed as to the reality of mental suggestion, it ought not, I think, to influence one's judgment as to Mr. Ochorowicz's book. Everybody, it seems to me, must recognize his sincerity, his perseverance, and his contempt for ready-made opinions. One feels that he has a passionate love of truth. That is an encomium that every man of good faith will appreciate.

CHARLES RICHET.

PART I.

EXPERIMENTS AND OBSERVATIONS OF THE AUTHOR.

"THE MAN WHO, OUTSIDE OF PURE MATHEMATICS, PRONOUNCES THE WORD IMPOSSIBLE, LACKS PRUDENCE."—ARAGO, in his *éloge* of Bailly.

THE limits of the possible are receding. The experimental method, after having founded positive psychology, is itself introducing us into the domain of the miraculous.

"Hypnotism" is henceforth part and parcel of science, and "suggestion," which produces most of its wonders, no longer surprises us; on the contrary, we constantly refer to it as explaining other phenomena still harder to understand.

Yet with *mental* suggestion the problem grows complicated. The explanation offered by the Commission¹ of 1784, viz.: "imagination and imitation," no longer suffices. One loses one's way; one *seems* ready to spurn science and to go headlong into occultism.

This limit once overpast, and mental suggestion accepted, may we flatter ourselves with the thought that there is some other phenomenon still more extraordinary to study?

But what matters it? Truth has nothing in it to make science afraid. This truth may even be absolutely at variance with current opinions, but none the less is it worthy of being studied with care, for nothing is so helpful to progress as a discovery that contradicts dominant theories.

But—is this a discovery? Is it a truth? That is the whole question.

Let us for the nonce put away scruples; let us double our habitual precautions, our tests, and let us examine the facts. An experiment

¹ Appointed by the French Academy to investigate "Mesmerism."—*Translator*.

is always instructive, even when it involves an illusion. Saved from the trouble of explaining the experiment, we shall have to get at the illusion; and if we succeed in accounting for that, why there is a result at all events.

And now, kind reader, if we are agreed as to principles, let us begin our little journey in search of a phenomenon in Mental Suggestion.

CHAPTER I.

APPARENT MENTAL SUGGESTION.

I MUST, first of all, confess that a year ago I did not believe in mental suggestion—not only did not believe in it, but the question did not to me appear to be important enough to warrant a special study. Yet several times I had tested the alleged action of thought upon a certain number of subjects.

First at Lublin, in 1867,¹ I experimented on a youth of seventeen, one pretty difficult to endorm,² but who, once in the somnambulic state, presented certain interesting phenomena.

For example, he would recognize any person of his acquaintance who might simply touch him on the back with a finger. Once he distinguished in this way as many as fifteen persons, one after another; and I must add that some of these persons entered after he had been endormed.

Though he showed a little hesitation with regard to persons that did not belong to the circle of his habitual acquaintance, he always distinguished my touch from that of every one else; and once he recognized a lady that had entered unknown to him, and whom he had seen for the first time several days before.

How could he do it?

As for the difference between the magnetizer and a stranger, it is very clearly recognized by many somnambules. The magnetizer's touch is to them either agreeable or indifferent, while the touch of any other person causes them pain. Why? Because these persons, say the magnetizers, are not "in rapport" with the subject. But that phrase does not tell us much. What, then, is "rapport?"

To state the question clearly, it is first to be observed that this phenomenon does not exist in "hypnotism" properly so-called. Let an hypnotized subject be touched by whomsoever, and if that touch

¹ That same year appeared my first work on "Magnetism" (Warsaw, 1867, *Gazeta Polska*).

² In French, *endormir*—to put to sleep; to put in the magnetic or the hypnotic sleep.—*Translator*.

causes him pain, then the touch of all other persons will have the same effect. He hears either everybody or nobody, obeys everybody, and can be awakened by any one.

It is not always so in the magnetic sleep, so-called, produced not by an inanimate object (a shining button, for example), but by a magnetizer, and especially by passes.

Now, every person has his own way of touching, and when one is accustomed to it, one readily notices the contact, the warmth, or the pressure of a strange hand. Some domestic animals, cats especially, will not suffer strangers to fondle them. If we stroke with the hand a sleeping cat that shows this idiosyncrasy, we easily recognize the fact from the difference in the reflex movements. The cat stretches herself out at full length languorously if it is her mistress that strokes her; if it is a stranger, she awakes dissatisfied and runs away.

The isolation in which the magnetized subject exists, and the possibility of his concentrating his attention better than in waking, facilitate this differential sensibility. It is strengthened by exercise, by habit. The subject takes those impressions best to which he is accustomed; sometimes even they become for him a need, an agreeable necessity, whereas unexpected and unwonted sensations confuse him.

But when there is question of distinguishing between strangers, this explanation seems no longer sufficient, even though we suppose molecular differences of touch—differences probable indeed, but not proved; which, besides, would have to be known beforehand, through habit, so that the subject might from them infer correspondence between a certain physical sensation and a given psychic personality.

Have we, then, here mental suggestion?

To recognize a person is to recognize in particular his *psychic* personality; that is, to recognize that living whole, inwardly active, whereof the external tactual manifestations are but a weak reflection. If, then, it were proven that the *ego* of a person can act upon the *ego* of the subject, that were a direct explanation, and it would be relatively adequate. The person touching thinks of himself; his mental state may be represented by an affirmation ("It is I") and a question ("Do you recognize me?"). All the persons present are looking at him, and, of course, thinking of him; hence, the whole company influences the subject, and this influence constitutes suggestion.

But if such an explanation is to be accepted, mental suggestion must be proved to exist, while these experiments are far from proving it by themselves. Hence, I turned to another explanation, more natural, indeed, though rather complex, *vis.*, that there was suggestion on the part of the company, but not mental suggestion. The subject was blindfolded, but as I called his attention to the people around him he could hear all that passed; he was at home, habit made him familiar with every possible noise of doors, furniture, floor;

intimately acquainted with the eight or ten persons present before his sleep; those who, at a given moment, did not take part in the experiment would freely exchange a few words in a high voice, while the others would request silence; the hearing of familiar voices enables one pretty accurately to determine the position of different interlocutors; and the noise made by the unavoidable changes of place helps one to complete or to correct one's judgments as occasion may require.

All these inductions may have been perfectly unconscious. In some respects we are better observers in dreams than in the waking state. The imaginary scenes of our dreams represent persons of our acquaintance in strict accordance with their characters and habits, reproducing their favorite sayings, and no end of physiognomic signs that our conscious observation takes no note of. Hence, it well may be that a somnambule, who has no distractions, whose whole recollection and whose every sensation contribute to one single perceptive act, can make out better than we the connections of certain signs.

The only fact that struck me as rather unaccountable, was the somnambule's recognition of the lady whom he had seen only once; but that incident presented some peculiarities of a kind to serve as pointers. The rustling of a silk robe behind his chair betokened to the subject a woman, and she a stranger, for the women of the house had no such robe. She hardly touched him, thus plainly showing timidity; *ergo*, more likely a spinster than a married woman; of the young ladies likely to come to the party in a silk gown, Miss W. stood among the first; *ergo*, it is Miss W.

Consequently, in the facts described, we have only *suggestion by conjecture*.¹

Here is another experiment made upon the same subject, and apparently still more extraordinary. The problem was, to determine whether there was vision without the aid of the eyes.

I take up a book at such distance from the subject that he cannot see what it contains, and I open it anywhere. I then bid him read.

"I do not see clearly," he answers. I suggest to him the first two or three words of the page, and ask him to go on with the rest. "That is in the middle of the second volume," says he, naming the chapter; "it is Kraszewski's novel 'The World and the Poet.'" "Just so," I answer; "go on, then." And to our great astonishment he goes and reads a whole page, with hardly a slip. Whenever I laid the book aside he stopped; he "read" fluently when I kept my eyes on the text. I turned over a page; still he read well.

Some of the persons who witnessed this experiment thought they had here a demonstration of "second sight," despite the explanations I offered, and which I will state presently.

¹ We shall see later that the explanation of "rapport" given here is in many cases inadequate.

But if it was no "second sight," do we need a better proof of mental suggestion?

Unfortunately, we do! For, first, he "read," though less well, while the book was closed; he needed only to have the opening phrase of a passage given him—therefore it was not thought-transference; neither was it second sight, for without that suggestion of the opening words he could not even read the number of the page, or make out anything whatsoever.

Here is the explanation of the mystery: The youth had shortly before read twice over the novel by Kraszewski already mentioned—had read it as people used to read in Poland in those days, and particularly those 17 years of age. He knew it almost by heart. Evidently he could not recite page after page *verbatim* in the waking state; but the one thing that our experiment proves is, the astonishing *activity of recollection in somnambulism*. And as for the influence of my thought, that is a very simple matter; the subject "saw" better while I was looking in the book, because then I used to correct his little errors. It was these errors that suggested to me the true explanation of the phenomenon; for instead of reading faultily a word in the text, he substituted another word of like meaning, but totally different in form. The regular train of association being thus interrupted, he used to come to a stop if the book was shut, for I could not come to his assistance.

In spite of these failures, I still tried to obtain direct mental suggestion.

1. The subject was required to repeat my gestures, made in an adjoining room, with the door ajar. These experiments yielded no striking result—merely a few coincidences from time to time.

2. With eyes blindfolded, he was required to come to me, passing through several closed rooms.

This experiment was always successful, but it was necessary to inform him in a general way that it was about to be performed. Then, always after a delay of several minutes, he would find me. Quite evidently he was conscious of my presence as soon as he found himself in the same room; but that was no proof of mental action, more particularly because all tests made without previous notice—*ex improviso*—gave only negative results.

3. He was required, by touching my hand, to find out the thought in my mind. Result: little or nothing, though there were a few successes.

I account for a certain number of coincidences as follows:

1. He and I were comrades, living together under conditions, and not seldom did it happen that we had * simultaneously.

2. The gestures that were repeated at a di

gestures and attitudes, which are very few and which might easily have been guessed at random. I remember, for instance, having begun the experiments by an order "to raise the right arm." Now this is the first thought that occurs to one who wishes to experiment on mental suggestion, just as when one would prove free will one usually strikes the table with the fist, saying "I can strike or not strike."

As the subject did raise the right arm, but did not carry out the orders that followed, I had the right to judge that simultaneously, though independently, he had the same thought that I had. Be it added that he was notified in advance that he was to perform certain movements mentally ordered by me.

In 1869 I renewed these experiments at Warsaw with an Italian lady said to be "lucid," and whose performances were much talked about. One thing remarkable about her was the almost total insensibility of the pupils of her eyes to light, in the state of general contracture. Having endormed her and applied tests, I was surprised to observe the very great facility with which she recounted her somnambulatory dreams; it was indeed a pleasure to hear them. As for "lucidity," or clairvoyance properly so-called, it was very obscure, and not even once did I succeed in arresting the tide of her eloquence by a mental order.

Further on it will be seen that in the state of active somnambulism, when the somnambule talks much of herself, mental suggestion is not possible.

The same year I made also some "spiritist" experiments, which have a bearing upon our subject.

They came about in this way: A sober-minded man one day attended a table-turning seance. Seeing the infatuation and the ready enthusiasm of the company, as they amused themselves with unconsciously pushing the table, "I will believe in the spirits," he said, "if they tell me the forename of my grandfather."

He was himself advanced in years, and was confident that no one in the company knew his grandfather's name.

"It may be that the spirits themselves do not know it," gravely remarked a spiritist who was managing the experiments; "but if you concentrate your thoughts upon the name, which you alone know, they will be able to tell it you."

Some one recited the alphabet, and the knocks on the table when the corresponding letters were pronounced made up the fore-name "Adalbert"—the correct name.

"This is diabolism," said the serious-minded one, and he vowed to himself that never again would he witness the doings of spiritists.

When he told me the story, I was justified in supposing the case to be one of mental suggestion. As I did not believe in the spirits, I

must needs resign myself to this latter hypothesis, or else adopt the hardly probable explanation that it was all mere chance. Nevertheless, considering the complexity of this kind of experiments, and the probability of some sort of illusion, I decided to accept nothing save what should be proved by an experiment to be made by myself under well-known and clearly-defined conditions.

Soon an opportunity was offered to apply the test.

Of the five persons (young women mostly) seated round the table, none, as I was assured by all, knew the name of the grandmother of a certain aged lady, who took no part in the experiment. That name was spelled out. But on investigation I found that one of the girls that turned the table must often have heard the name pronounced; she herself admitted to me that in the course of the seance she had recollected the name, which a few minutes before she believed she had never known.

That sufficed to justify belief in a more or less involuntary influence of her muscles.

I then thought of a purely fictitious name known to myself alone.

The table answered with another name having no resemblance whatever to the one in my mind. I pretended to write a word on a bit of paper. The answer of the table was "louche"—a word that no one had thought of. This showed that the unconscious imagination of the mediums was bound to go astray when it was not guided by some sort of suggestion.

Let us pass to another experiment. Before coming, I had prepared a photograph of one of my friends, putting it in a sealed envelope.

"What is in this envelope? Is it a letter, a bank note, or a photograph?" (I give the question *verbatim*, according to my notes.)

"It is a photograph."

"Of a man or of a woman?"

"A man."

"How old?"

The table gave 23 knocks, which was correct. The believers were delighted; but on reflection, after recalling all the circumstances, I was unable to agree with them.

First, the probability of the correct answer being made was very great—for the first question, 1 to 3; for the second, 1 to 2; as for the third question, the probability there was considerably less, but—I had made a slip which no doubt decided the result. For when the table, after giving 23 knocks, stopped for a moment, I hastily exclaimed "That's it!" But before coming to the twenty-third knock the table had stopped now and then, *and I had said nothing*. The impression left upon my mind was that had the knocking not been stopped by my exclamation, the table almost of a certainty would have kept on knocking.

Next, I noticed that the envelope showed pretty plainly the shape of a photograph card, slightly curved, and manifestly stiffer than a letter or a bank note.

Finally—and this is a point not easy to make plain—I felt distinctly that in that company, and under the conditions given, a photograph of a man was much rather to be expected than the photograph of a woman.

Hence this was a case of suggestion by conjecture, and perhaps a matter of chance.

Here is another instance of apparent success :

I request a lady, not of the mediums' set, to pass to another room, to write some number on a bit of paper, and not to show it to any one.

Upon her return, I ask the table :

"How many figures are there?"

"Two."

"What is the first?" I then name all the numbers, zero included, but the table makes no sign. I begin again :

"Is it *one*?"

"Yes." (It had been agreed with the "spirits" that one knock was to mean *yes*, two knocks *no*.)

"And the second figure?"

The table gave 6 knocks. But we had hardly come to the sixth when the lady exclaimed : "It is astonishing ; I wrote 16!"

I must add that she could not decide what number to choose. "Must I write one figure or two?" she asked of me before quitting the room.

"Any number at all," I replied, "one of two or three figures, for instance." Thus the suggestion of *two* figures was given by inadvertence.

We began again, and this time under stringent conditions. I alone knew the number, and I wrote 4 ; the table guessed 346.

In 1872 a young German lady of high sensibility and delicate constitution, subject to hysterical fainting fits, suggested to me the thought of a new trial. I had made a series of observations upon her pulse changes in various phases of somnambulism. But in her case the psychic phenomena were of little moment, while mental suggestion would not work at all.

I will pass over a multitude of experiments made with persons in the waking state unbeknown to them—making a person, whose back is toward you, turn about when you order him to look at you. These experiments have now and then been successful, but never under stringent conditions. Once, however, the appearances surprised me a good deal. I was in a ballroom. A young woman attracted my attention by her peculiarities of feature ; so I often looked toward

her, and fancied that whenever my gaze was fixed upon her for any length of time, she would turn her head and look in the direction of me. Still she could not see me. To verify the phenomenon, I chose a less favorable moment and succeeded. I tried once again, and the success was the same. Then, being in an adjoining room, I said to a friend: "Let us make a curious experiment. Do you see that girl in the corner of the ballroom? I will make her come hither." A minute afterward the young lady rose, entered the room, remained for a moment undecided, cast a look of interrogation upon us, and then went back to the ballroom.

I made her acquaintance a few weeks later. On being tested with the hypnoscope¹ she presented only a slight numbness of the finger. She was rather hard to endorm (15 minutes), and the sleep was very light and was soon over. *No experiment in mental suggestion was successful.*

Was it then an illusion? I believe it was.

Having reflected upon the case, after making the acquaintance of the subject, I interpreted quite differently my prior successes. In the first place, it was nothing surprising that she turned her head while I was looking at her, for having heard of me, she wished to make my acquaintance; and it is even probable that, through a very common illusion, I fancied that I had first noticed her "because of her peculiarities of feature," whereas, in fact, she had for a good while been observing me, and so had, unconsciously, perhaps, given direction first to my attention and then to my experiments.

This incident gave me a disgust for mental suggestion, and many remarkable subjects came under my hands without awakening any desire to test with them the transmission of thought.

I recall another discouraging circumstance:

I went to an "extraordinary" exhibition given by a certain "Vicomte de Caston," who performed feats of memory and præstigation, improvised verses, read without the aid of the eyes, and divined thoughts. The seance was highly interesting to the psychologist. I say nothing of tricks of the common sort; albeit here, I am free to say, is a study that I heartily commend to every psychologist who is curious about hypnotism in general and mental suggestion in particular. Sleight-of-hand is the result of an ingenious application of the psychology of attention,² involuntary associations, illusion, and reflex movements, rather than of psychic power. In hypnotism

¹ This is the name I have given to a peculiarly shaped magnet, which, applied to a finger, serves to show one's hypnotic sensibility. With few exceptions, this instrument always gives positive results, and it is very convenient for use, for its application lasts only two minutes. (See Appendix I.)

² See the remarkable work of Ribot bearing that title (Humboldt Library, No. 112). —Translator.

the great præstigiator is Hartmann's Unconscious: if one is not to be its dupe, one must be "up to its tricks."

But among the performances of this "vicomte" the thing worthy of mention here was a series of tricks grounded solely on *the association of ideas*.¹ We know how easy it is, by a very simple ruse, to make a person select a given card from among many. You have only to exhibit before his eyes the cards of the pack, one after another, rapidly, but in such a way that only one shall be fully and distinctly visible. You thus trick the subject's vision, and he selects the suggested card as a matter of course. Our psychologic præstigiator had developed this method, applying it to operations purely mental. Having in readiness a certain number of envelopes, sealed and containing a word written beforehand, such as "rose," "diamond," "negro," he opened a lively conversation with the audience. Discoursing *de omnibus rebus et quibusdam aliis*, he would stop just at the moment when the most direct and the most inevitable association was with one of the predetermined ideas. Then by a clever detour he came round again to the same association, *which he never expressed*, and suddenly asked a person he deemed to be absorbed in the performance, to think of some object.

The object thought of was always the one suggested.

All he had to do now was to ask to which of the three kingdoms, mineral, vegetal, or animal, the object belonged, to insure success, and to prove to the person interested that his thought had been written down by itself in a sealed letter.

As the experiment just described is but a conscious utilization of a mental process that is daily and hourly repeated in ordinary life, it follows that in very many cases the *psychic atmosphere* of a company suffices to account for unexpected coincidences of thought between the experimenter and his subjects—coincidences all the more surprising the less one knows about the unconscious mechanism of these suggestions, *mental* suggestions, if you please, though they have nothing to do with thought-transference. Ever since that time I have held that in a successful experiment in mental suggestion there are always *two* questions to be settled. The question, How did the subject divine the thought? is but the second; while the first is, How came the experimenter to choose one thought rather than another? We can judge of the scientific value of an experiment only according to the intimate relation between these two processes.

Whenever several persons hold a conversation for any length of time, there arises between their minds a reciprocal enchainment. A clever observer has then but to isolate himself from this involuntary mechanism and to grasp it mentally in a general view, and then

¹ See "Diseases of Memory," by Ribot, (Humboldt Library, No. 46).—*Translator*.

sometimes he can *foresee* the object that some moments later will occupy the attention of the company. It is this same mechanism that often causes two persons in a company to express the same thought or to raise the same question. The better one knows those about him, the greater his success in this psychic "clairvoyance." I remember how once, being secretary of a society, the object of which was the publication of an encyclopædia of the sciences, I wrote in advance the notes of one of our meetings. The question before the society was whether theology should be reckoned among the sciences that were to be treated. There were two priests on the committee. Knowing the members and their views, I risked the experiment. The "minutes" were written out; they gave an account of the general discussion, and closed with this resolution: "Resolved, that theology ought not to be treated, save as constituting a part of the history of religions." I had to change only a few words in order to submit the minutes to the members for approval.

Of course, one cannot be so good a prophet unless he is in some degree an accomplice; but one is always an accomplice when one orders the carrying out of a thought that comes to us mechanically. For instance, you are a frequent visitor at a house. You do not recollect the fact that at your last visit the conversation was about colonial policy, and that immediately after it was over a lady sat down at the piano. The talk is now again about colonial policy, and the thought occurs to you to make an experiment in mental suggestion. So you order (mentally) the lady to go to the piano—and she goes. You are amazed at your success—all the more because you see no connection whatever between colonial policy and a piece of piano music, and because your chum assures you in all sincerity that in some quite inexplicable way the idea came suddenly to him to take a seat at the piano.

We may utilize this unconscious process with deliberate purpose: My friend P., a man no less absent-minded than he is keen of intellect, was playing chess in a neighboring room. Others of us were talking near the door. I had made the remark that it was my friend's habit, when he paid closest attention to the game, to whistle an air from "Madame Angot." I was about to accompany him by beating time on the table. But this time he whistled something else—the march from "Le Prophète."

"Listen," said I to my associates; "we are going to play a trick upon P. We will mentally order him to pass from 'Le Prophète' to 'La Fille de Madame Angot.'"

First I began to drum the march; then,
common to both, I passed quickly to the
measure of my friend's favorite air. P
changed the air and began to whistle "

notes
ato

Every one burst out laughing. My friend was too much absorbed in a check to the queen to notice anything.

"Let us begin again," said I, "and go back to 'Le Prophète.'" And straightway we had Meyerbeer once more with a special fugue.

My friend knew that he had whistled something, but that was all he knew.

One who knows a person's habits can sometimes imitate mental suggestion, even without any suggestive impression.

In the Medical Faculty of X., we had a professor of philosophy, who, in giving his lectures used to look first to the right, then to the middle of the room, then to the left, again to the right, and so on, with the regularity of a pendulum. In this little habit there was nothing offensive to any one, and it had passed unnoticed. One day he was proving to us the psychic liberty of man.

"You will soon see his freedom of will," said I in pleasantry to my fellow students. So extending a finger, I began to give orders for the movements his head was to make to the right, the middle, the left.

Do not think that this anecdote has no bearing upon our subject. Of course, the thing was but a piece of pleasantry ; but had it been taken seriously it would have been a deception. Now, in hypnotism, physiologists are liable to just such deceptions, involuntarily, if while understanding well how to observe external facts, they do not know how to observe their own selves. Here is an instance of this from my own experience : it comes fully within the class of apparent suggestions.

I was treating by hypnotism an elderly lady suffering from chronic arthritic rheumatism. I put her asleep very readily, and absolute repose of half an hour (*aideic*¹ state) always sufficed to calm her nerves, and to improve her natural sleep, at least for a few days. There was no means of producing somnambulism, properly so-called, or of making the subject talk (*polyideic*¹ state), so I left her, and occupied myself with turning over the leaves of a book, and awaiting the time of her awaking. One day I thought I should awaken her by a mental order. "Awake," said I to her mentally, and at once there were contractions of the face muscles ; the eyes opened, and she was awake.

Some days afterward I tried to make her perform certain movements, but in vain ; but I succeeded in awakening the subject as before, though not so promptly. Still, it was a surprise. But why did she awake, and yet prove insensible to other suggestions ?

The reason was this : Here were two habitudes that had passed unnoticed. Continuing the treatment for several weeks, I had fallen into the habit of awakening her just half an hour after sleep had

¹ *Aideic* (Greek, *a*, privative ; *idea*, idea, thought), without thoughts. *Polyideic* (Greek, *polys*, pl. *polloi*, much, many ; *idea*, thought), with many thoughts. *Monoidaic* (Greek, *monos*, single ; *idea*, thought), with one thought.—*Translator*.

become manifest. I did not look at my watch, but went always at the fixed time; and as that was one hour before dinner, my stomach took the place of my watch perfectly.

The patient too had acquired the habit of waking almost precisely on the minute—a phenomenon familiar to magnetizers. This does not happen in every case, but it does happen very often.

This suspicion occurring to me, I resolved to find out whether it was correct. I readily found

1. That I was unable to awaken her "mentally" 10, 15, or 20 minutes after she was sound asleep.

2. That she always awoke of herself after 30 or 35 minutes, without any mental suggestion.

Thus we were in just the condition of our anecdote, except that in the one case the cause of the coincidence was known from the first, in the other it was not.

In 1881 I attended, in Lemberg, the magnetic seances given in that city by Donato. Among his performances was one which, though not presented as an instance of mental suggestion, nevertheless wore all the appearances of one. Miss Lucile, who was blindfolded, remained upon the stage, seated, while Donato went among the audience and invited persons to name to him, in a whisper, a certain number of acts for the somnambule to perform afterward. For instance, to fan herself with Mrs. N's fan; to spread Mr. X's opera hat and put it on his head; to take Mrs. Y's bracelet and put it on the arm of Miss Z, and so on. It is to be remembered that the choice of acts to be done is very restricted, the same thing pretty nearly all the time, yet there was no trickery; the *psychic atmosphere* played its own part.

Donato, having received the requests that were made, led Miss Lucile toward the audience, and without speaking a word, solely with the aid of gestures made at the distance of one or two paces from her, then nearer, he conducted the "medium" to the persons in question, and she performed perfectly every act that had been requested.

This experiment made a deep impression, for it was evident that there was neither any understanding with the subject nor any collusion with the audience.

How was Miss Lucile able to perform these interesting feats?

"By *magnetic education*" was the magnetizer's answer. It was vague, and yet true.

There exists in magnetism a phenor
tizers—that of *magnetic attraction*,
the hand near the arm of the end
goes out in the direction of the b
Though the magnet produces
suffer himself to be deceived

by hypno-
to bring
at arm
ements.
must not
on has

nothing in common with the attraction of iron by the magnet ; it is not of a physical kind, but of the reflex order.

But that is a distinct question, which we need not touch at present. The important point, the one that has to do with the matter in hand, is that this faculty, possessed by very many somnambules, may be cultivated and improved by *magnetic education*. Little by little the subject becomes sensible to various attractions, and if to the automatic attractions there be added quick understanding of gestures, then the subject possesses everything that is needed for a marvelously perfect simulation of thought-transference.

At first the subject is influenced only from anear, and can understand only simple movements ; later he grows accustomed to his magnetizer's ways, comprehends his inchoate gestures, and an automatic association is formed between the almost unnoticeable directions of the experimenter and certain reflex, or even voluntary, movements of the subject.

Thus was Miss Lucile able to execute the unspoken orders of Donato.

There is another and much simpler way of simulating mental suggestion. Donato himself has shown that by making certain motions with his fingers at Miss Lucile's ear, he could produce a hyperacusia¹ sufficient to enable the subject to hear words spoken so low and with lip-movements so slight that even persons on the watch for them and observing attentively were unable to hear anything. I have repeated this experiment many a time, in one case—to mention no others—with a peasant woman of Zakopane in Galicia, who, though her ears were plugged and her head wrapt thrice around with a coarse thick kerchief, repeated words spoken as low as possible by me at the distance of 13 feet.

Plainly with such a degree of hyperæsthesia the subject can :

1. Hear direct what is spoken in the ear of the magnetizer ;

Or, 2, hear what later he whispers into her ear, unheard by the bystanders.

Donato kindly held for my behoof a private seance, at which I had an opportunity once more to experiment on mental suggestion. The magnetizer himself expressed some doubts upon that head. The phenomenon he believed possible, and he had once demonstrated it in the presence of Mr. Arkasof; but according to him the experiment is but seldom successful—how, no one knows ; in most cases it *mis-carries*—why, no one can tell.

We made the attempt, nevertheless.

Miss Lucile stood with her back toward us; I was on the right of the magnetizer, between 6 and 7 feet from the subject. The latter

¹ Hyperacusia: Greek, *hyper*, over; *akoue*, hearing. A super-sensibility of the *se* of hearing.—*Translator*.

was to *extend the left arm*. After a minute there were some slight movements of that arm, or rather of the whole body—movements that may have been produced by the subject's fatigue, and may have had no relation to the intentions of the magnetizer. This was readily admitted by Donato. "I should be more sure of a result," said he to me, "if you would allow me to act by gestures." But that was not the question; undoubtedly, he could, acting by attraction, cause the the arm to be extended.

Other attempts had no better result, whether it was I that gave the order after endorming the subject, or whether it was Donato himself. I simply proved again what I had already proved with one of my first subjects, to wit: the subject's power of recognizing the person that touches her on the back (through the clothing). When Donato endormed her, a touch from me caused her pain; the contrary was the case when I myself magnetized her, but she always bore more easily the touch of her customary magnetizer.

Care was taken that the subject should not be able to tell who touched her, except from the mere act of simple, slight contact.

This phenomenon I have since verified in nearly all highly-sensitive subjects, when *magnetized* (*not* hypnotized), and so I have been obliged to postulate an individual physical action not found in Braid's hypnotism.

This physical action is a matter of no slight importance in the problem of mental suggestion, as will be seen later, but evidently the one does not imply the other.

Notwithstanding this evolution of my views, I was still far from believing in thought-transference. On the contrary, the foregoing attempts discouraged me, bringing to light the full complexity of the question and all the causes of error.

One thing I had learned, to wit: that a skillful magnetizer who has a suitably trained subject, can imitate mental suggestion perfectly, or may himself be duped by unconscious associations. Witnesses in relating the performance, transfigure it, embellish it involuntarily, in virtue of the psychic faculty—of great value in art, but highly dangerous in science—which has been called “complementary imagination.”¹

By omitting details that seem insignificant, and magnifying others that seem essential to the understanding of the situation, one makes up in his own mind an experimental "demonstration" that in reality demonstrates nothing but one's own personal enthusiasm. If in narrating the facts for *usum Delphini*,² one adapts them just a little "in second time pretty nearly

¹ *Fantaisie* n.

² A famous
Louis XIV.,

prepared in the reign of
-Translator.

as at the first, and the third *pretty nearly* as at the second; slight modifications then go on accumulating and little details drop out. Thus, persons little used to strict scientific method in the end will, in all sincerity, tell of things that never were. A scientific man will not go so far as this, yet he may easily permit himself to be fascinated by a novel and unexpected impression received under conditions that either cannot be, or that at least have not been, ascertained with precision. That is enough to lead to an erroneous *interpretation*, which may go so far as to assert the existence of a new phenomenon that does not exist at all. Lest I should be accused of exaggeration I give an example:

Mr. Hughes, inventor of the microphone, the printing telegraph, etc., a noted physicist and thinker, believed it to be demonstrated at the beginning of his researches that the microphone *increases* the intensity of sounds. That was an error of interpretation, caused by certain illusive effects. No microphone has ever amplified the intensity of *speech*, or of *sounds* in general; on the contrary there is always a notable reduction of the intensity. How comes the error, then? From the failure to distinguish between the *sounds* and the mechanical vibrations accompanying them. The microphone makes audible the tread of a fly over a thin planchette, but not because it amplifies the *sound*—which, indeed, is imperceptible directly—but because it *transforms* into sounds the mechanical vibrations of the fly's tread. Place near the planchette a watch that makes a far louder sound, and you will hear nothing; but set it upon the planchette of the microphone, and you will hear the ticking through the telephone a great deal better than you can directly, because in the latter case the mechanical vibrations are transformed into sounds, and these are added to the real sounds. Now, this error of interpretation has circulated so widely that even to-day you will find it asserted in works on physics that sounds are amplified by the microphone—in other words, a fact is said to exist that has no existence at all.

The case is often much the same with regard to mental suggestion. It is not the evidence for the naked fact that is at fault, but the interpretation of the fact—the determination of the causal relation between two phenomena that in themselves are verified easily enough. The thought of one brain is succeeded by a like thought of another like brain: is the case here like that when two telephones influence each other by the aid of undulatory currents? or are the conditions like those of the two watches supposed by Leibnitz, which, while indicating the same hour, were mutually independent? That is the question. And it must be added that between these two extreme situations there is plenty of room for an intermediate state of some complexity; for while independent in their mechanism, the two watches may be imperceptibly regulated electrically or pneumatically. Have the physicians

who like Barrier, Teste, Bertrand, Charpignon, Garcin, Despine, *et al.*, vouch for us the reality of thought transference—have they seen an actual transmission? They have seen only two watches that *sometimes* indicate the same hour. I was therefore justified in regarding their testimony as insufficient, and that for still another reason:

In order to judge aright of such a fact as this, one must of necessity have in mind the *suggestion theory* of hypnotism; one must ever remember that all hypnotic phenomena whatever may be produced by imagination alone, by *ideoplasty*.¹ Consequently, to make out a case of somnambulism produced from a distance, for example, it is not enough simply to verify the fact; we must furthermore have absolute certitude that it has not been possible for the subject by a combination of the circumstances or by the behavior of the person whose business is to observe him, to *presume* what the experiment is to be. Further, this presumption itself *may be unconscious even while it brings about the desired result*. On this point my hypnotic studies leave no doubt. In fact, even when the subject has anticipated nothing, when he declares that he has suspected nothing, one is not free from uncertainties. Hence, notwithstanding all that has been published by the priest Faria, by Hénin, Cuvillier, Bertrand, Braid, Durand, Gros, Morin, Szokalski, and Liébeault, the theory of suggestion was really not known and recognized till the publication of Dr. Bernheim's ingenious work. At one time the action of "magnetic currents" in space was found to be comprehensible, but it was held to be improbable that somnambulism might be produced by means of a letter (not magnetized) fixing the experiment for a given hour. The subject fell asleep a few minutes after a concentration of will at a distance, therefore it was the thought of the magnetizer and the "magnetic fluid," its agent, that produced the somnambulism; *post hoc, ergo propter hoc*.

For a long time these doubts seemed to me sufficient to withhold me from new experiments. But one always returns to his first love.

While giving at the University of Lemberg (1875-'81) a course of lectures on physiological psychology, I studied the different questions of hypnotism a good deal. Many of my students willingly offered themselves for all sorts of researches, and then it was that I began to see my way a little better in this mysterious region. One day I brought together six of my best subjects in a hall of the Polytechnic School, from which every ray of light was excluded, in order to test the alleged discoveries of Baron Reichenbach.² We remained three

¹ Ochorowicz, *Sur l'idéoplasticité: classification des faits; et sur la théorie de l'idéoplasticité* (*Comptes rendus de la Société de biologie*). Ideoplasty (Greek, *idea*, idea, mental image; *plattēin* or *plassein*, to shape, whence *plastēs*, modeler), imagination, or the power of conceiving, or forming, mental images. See Appendices II., III.—*Translator*.

² Reichenbach asserted that the "influence" of a magnetizer upon his subject is manifested in a dark chamber by luminous emanations *emanating from him*.—*Translator*.

hours in absolute darkness, yet were unable to verify any of the statements of the German chemist. But to make amends, we discovered a new fact of considerable interest, namely, that certain hypnotizable subjects see far more distinctly the phosphorescence of an electric machine than do other persons. Threads of light, quite invisible to the rest of us, and forming a prolongation of the visible rays, were described perfectly by some of the subjects, and were objectively verified in divers ways.

I chose two of these subjects for an experiment in mental suggestion. The first, a youth of good stature and remarkably muscular, in good health, but highly sensitive to hypnotism (hypnoscope showed : irritation, anæsthesia, contracture) presented this peculiarity, that it was impossible to produce in him an hallucination or any word-suggestion whatever. Endormed by fixing the gaze, or by other equivalent means, he showed a *general contracture* and, psychically, a state of complete *aideism* (tetanic *aideia*). To make him talk, it was necessary to free the speech muscles, which were all contracted ; and once a reply was obtained, he did not fall asleep any more ; a certain dizziness and a general contracture alone remained. It was possible to awaken one hemisphere alone, and one-half of the body, but *somnambulism* could not be produced. He passed straight from the "lethargic" state to waking ; but in waking, as well as in the lethargy, it was possible to produce by localized passes, insensibility, hyperæsthesia, attraction, catalepsy and contractures, but hallucination never. So pronounced was the neuromuscular hyperæsthesia, that to produce a local contraction or contracture one had only to bring near to any part of his body, divested of clothing, a finger, a magnet, or to project a ray of light, or even to look fixedly upon it.

If I endeavored to influence him mentally by ordering a movement, that movement was not performed, but the member on which I looked was seized with contracture. If instead of acting by look I acted by gestures, there was an exceedingly strong attraction of the whole body, and he performed all the acts indicated by the attractions, till a general contracture obliged him to fall rigid or to stand motionless. The rigidity had then to be removed by gentle massage in order to continue the experiment.

This special sensibility was developed little by little. The attraction did not manifest itself till the fifth magnetization. (All these experiments were reported to the Medical Society of Lemberg in 1881.) It was proven to my satisfaction that he was capable of being influenced by looks—though the experiments were not always successful when made *extempore* ; but it was certain, at the same time, that mental suggestion by itself alone was always without result ; there was no trace of effect. When *hypnotized*, he obeyed every one ; when *magnetized*, he followed only his magnetizer ; the latter alone could awaken

him, or cause the contracture to disappear, but always by massage, passes, gestures, by blowing on the subject, not by a mental order. Once or twice only did I succeed, in the state of momentary stupor of the brain prior to the awaking, in transmitting to him some *physical sensations*—as a painful puncture, a bitter taste—but even then there was uncertainty as to interpretation, and I could not guarantee the value of a few successes.

My other subject was also a young man, tall of stature, but not strong; highly intelligent, rather anæmic and consumptive. He was very sensitive, even too sensitive, to all sorts of impulsions (hypnoscope showed analgesia, instantaneous contracture of the whole arm). The application of the hypnoscope at the pit of the stomach produced in him a series of peculiar phenomena—sensations, contortions, sharp long-drawn cries, and rotary movements of the arms, the head, and the whole body. He was remarkable also for somnambulic and suggestional dreams of all the senses.

First Experiment.—The subject, being in somnambulism (polyideic state), counts from 1 to 50. His counting was to be interrupted by a mental order *from a distance*. Result: a few coincidences, but in most cases the paralysis came too soon—it preceded the mental order: consequently it had to be regarded as produced by ideoplasty.

Second Experiment.—I touch the nape of the neck with my finger, and mentally order him to arise and go sit on a bed. The subject rises partly, slips to the floor, sits down, bows, kneels. One of the company, B, an engineer, says it was he that mentally gave him the order to kneel. (Probably the slight downward pressure of my finger suggested to the subject the idea of sitting on the floor, and then the lowness of his position produced in his mind the image of an attitude lowly *par excellence* and more convenient—that of kneeling; while at the same time, and through a like association, B got the idea of ordering that posture).

Third Experiment.—No touch and no gesture. The whole company think on making him *raise the right leg*.

He remains motionless, but says he wishes to *dance*. (The resemblance does not suffice to justify a conclusion.)

Fourth Experiment.—I alone give the mental order. I do not touch the subject, but I use gestures, and direct my looks toward the member in question. The subject is blindfolded. I stand in front of him at distances of 2, 3, 4 and 6 paces, respectively.

He performs various motions; rises, walks to the right, to the left, forward, backward (he retreats slowly and with difficulty), kneels, sits. I order him to extend the right arm—and he raises the left, that being the only act in this experiment that failed; at that time I was distant from the subject six paces. These experiments gave no result. Repeated, *without gestures*, Repeated with gestures,

but *without any special concentration of the will*, they gave nearly the same positive result as at first.

Fifth Experiment (a few days later).—The subject being in somnambulism, his eyes bandaged, his ears plugged, I stand in front of him at a distance of from thirteen to sixteen feet, and make gestures of attraction and repulsion.

For more than an hour all the tests of this fifth experiment were successful. The principal one was to determine whether the subject really had a sense of my presence. I therefore hid in remote corners, while I attracted him toward me. I took all possible care to make no noise. I changed my foot-gear; another person imitated my tread. I tried to lead the subject astray by speech, etc.; he followed me everywhere and found me always. In coming toward me he *sniffed like a hunting dog* (of all the persons present I was the only smoker, and my clothing was impregnated by the odor of tobacco).

Result: the subject was guided:

1. By an exceptional sensibility of the whole surface of his body for motions of the air (gestures at a distance);
2. By an exceptional sensibility for warmth (he felt the warmth of my hand at a distance of thirty inches);
3. By an exaltation of the sense of smell; but not at all by mental suggestion.

Sixth Experiment (some days afterward).—The sleep not perfect; he partly recollects after awaking (this, perhaps, because of the emotions of the day). Attraction often lacking.

One of my pupils, P., deceives the subject, who confounds him with me. The movements ordered are executed badly. The subject improvises, giving his dreaming fancy a free rein. He performs movements that no one thought of, while having the appearance of being under an influence. General result strictly negative.

Here is another negative experiment, performed on an hysterical young woman of marked sensibility. (Hypnoscope showed paralysis, contracture, and total anæsthesia of the finger.) There were two magnetizers, Dr. B. and myself. We each touch her on the head with a finger, ordering her to seize some object. The only result is that she falls asleep, but after a peculiar fashion, for the left half of her body is in rapport with me, the right with Dr. B. She hears me only through the left ear, and Dr. B. only through the right. So, too, with regard to attraction. If I touch the right arm, she has no sensation; it is the same if I touch her with any object, a stick, for instance. Looks have no effect, neither has purely mental suggestion.

Here are some experiments upon "willing."

We are in the Count D.'s *salon*. One of the ladies tells me how she several times has succeeded in suggesting to her friend one act or

another by placing her hands upon her shoulders. I make a few experiments which are successful, or nearly so. But in this sort of performances mental suggestion plays no part. Having studied the unconscious muscular movements that cause a table to tip, or a pendulum to sway, as explained by Chevreul, I knew what to think of these phenomena. These involuntary movements suffice to suggest directions to the subject, who is thinking of nothing and whose body is in unstable equilibrium. Sometimes he *divines* the rest, that is, even acts that cannot be indicated directly.

Yet one of these experiments surprised me. The Prince C. is *sitting* in an arm-chair—consequently is in a stable position. Two ladies kneel before him and form a circle by joining hands with him. The order is for him to *cross his legs and to dangle the right*. The order was carried out after a few minutes. In this case the explanation is complex. Involuntary movement of the legs is difficult when the subject is in a fixed position, with hands held, as in this instance. But first, just because of that position, the legs alone (and the head) were free, and hence it is not surprising that after some minutes of immobility he should have felt the need of moving his legs, and the only thing he could do, in view of the position of the ladies, was to cross them. Then, if only to verify the experiment, the eyes of the ladies were sure to turn every moment to the right foot of the Prince, who more or less automatically directed his attention to that point. The direction of attention toward a given point of the body always produces a tendency to movement, and the only convenient movement was the one he performed.

I must add that before this he made several movements *of the head*, which were disregarded as “unimportant;” but had one of these movements been selected, we should not have waited for the others, but should have had the same right to claim a success.

During the same evening I made still another experiment simulating will-action at a distance. Having noticed the sensibility of the Countess D. (hypnoscopic experiment : heat, numbness), I stand facing her and fix my gaze upon her for two or three minutes ; then I move away, walking backward, and she follows me ; I quicken my pace, still backward, and despite the laughter of the company, and though she made some opposition, she is obliged to follow. This experiment, one now quite familiar through Donato's performances, seems to prove a physical action of the will and of the eye. That is not so, however. The fixing of the gaze, expectant attention, and emotion produce a sort of fascination that may be regarded as an *intermittent monoidism*. Without losing consciousness and will completely, the predisposed subject undergoes, from moment to moment, the inhibitory influence of *his own mind* ; he is not paralyzed, but is subject to the *visual suggestions* that dominate his will.

Another experience in "willing" tried by the two ladies with the Count P. as subject was unsuccessful, and yet he was a sensitive subject (hypnoscopic experiment: prickling, heaviness, anæsthesia). I drove a pin into his finger, which had been locally "insensibilized" without hypnotization. This proves that the success of this sort of experiments is not always in proportion to the sensibility of the subject. We shall see further on what are the precise relations between *hypnotism* and *Cumberlandism*. I modified these tests in experimenting upon other persons.

Mrs. Sch., robust, but anæmic, subject from time to time (under the influence of emotions) to cataleptoid hysteric fits (hypnoscopic experiment: anæsthesia, localized contracture), is, while in the standing posture, put in the state of fascination by fixing the gaze. Mental order: *To pull me by the beard*. She slowly raises her hand in the direction of my beard, but does not touch it.

Mrs. A., weak, thin, nervous, but in fair health (hypnoscopic experiment: no result). Mental order: *To embrace Mr. S.* She goes in the direction of that gentleman and says: "I am to embrace some one."

Miss R., lymphatic, but in perfectly good health, with little sensibility (hypnoscopic experiment: prickling, heaviness). Mental order (with touch of the hand on the occiput):

1. *To go to the piano*. After a couple of minutes' hesitation, "I must play," said she.

2. *To embrace Miss E.* After a minute's silence, she says: "I am to embrace some one. It is you, Marie. No; it is you, Edvige."

3. *To guess whether I am thinking of an affirmation or of a negation*. She exclaims almost immediately, "You are thinking yes." The contrary was the fact.

Barring the last experiment, which might be regarded as the result of a mere erroneous conjecture, all the rest seem to indicate a real action. But they were not performed under faultless conditions; the subjects were not blindfolded, and the rest of the company, being in the secret, may have influenced them by their attitude. At all events, I remember distinctly that my individual impression derived from these experiments was not decisive. The first two, though more surprising than the last, because of the nature of the injunctions, which could not be easily conjectured, were not carried out fully. The others, in giving which I touched the subject, left room for doubt, as is always the case when that method is employed; and, besides, the acts enjoined on the subject may have been selected under the influence of the *psychic atmosphere*. I remember, for instance, that in the first part of the evening on which the last three experiments were made, Miss R. was asked to play a piece on the piano and refused. Little wonder, then, that when later she had to execute a suggestion, the same act came to her mind.

Then, the number of acts from which a choice has to be made on such occasions is very small. Indeed, in a decorous company what is there for you to bid a young woman do but to go to the piano, to embrace her sister, or the like? And if the order is merely to seize some object or to go to a place indicated, the touch of the hand and its involuntary pressures guide the subject very well indeed. I mention these petty details to show how needful it is to be circumspect and attentive in researches of this kind.

It was about this time that, having acquired a certain acquaintance with hypnotism, I resolved to apply it to the treatment of diseases. The result was surprising, and I saw not only that the assertions of magnetizers might be true, but also that a rational and methodical application would probably lead to the establishment of facts more surprising still. To-day we are beginning to take steps in that direction, and certainly it is time that, having demoralized a number of hysteric subjects, we should restore them to health by the same process.

Being absorbed in therapeutic study, I had neglected the problem of mental suggestion as apparently of no practical value; and it was only by accident that I had occasion to observe a few more or less unexpected phenomena connected with it. For instance, one of my patients could always tell, as soon as I touched her, whether my impressions during the day had been pleasant or disagreeable. She suffered from a complicated disease, which I might be tempted to call chlorotic ganglionic neurosis, and had been for thirty years bed-ridden. She was excessively impressionable, yet was insensible to hypnotism and to metalloscopy (hypnoscopic experiment: no result). An interesting peculiarity was that my hand seemed to her always warm, even when it was of much lower temperature than her body. As my attitude toward her was always the same, I marveled not a little at this faculty of discerning my mental state. But there are a thousand ways of guessing such things, as from the expression of the face, or from the tone of the voice; and there is no need to suppose a direct transmission. True, she could also tell whether before coming to her I had touched any other patient; but she might have inferred that from certain signs of fatigue, or from my coming a little late; perhaps, too, she was aided by olfactory sensations.

Another patient showed a like gift with regard to the persons who were habitually about her. She was hysterical, very easily hypnotizable (hypnoscopic experiment: anæsthesia and contracture of the whole arm), and manifested this aptitude only at the moment of awaking, *i. e.*, in a state intermediate between somnambulism and the waking state. She would then say of her own accord: "Oh! how weary X is of his work!" "Why is Y so worri you have more

hope of curing me, and you are very much pleased. I thank you for that," etc. All this she would say before opening her eyes, and often without a single suggestive word being spoken. Was there a real transmission of states of mind? I did not think there was. The same people were always around her, and she knew them well enough to be able to make these prejudgments. But there were a few strange coincidences.

Finally, a third patient, a Frenchwoman, knowing not a word of Polish, made apt reply (in somnambulism) to an observation made in the latter tongue. There was no analogy between the words. But this thing did not occur again, all further experiments in mental suggestion having failed, so I set the occurrence down to the account of chance. This subject was easily hypnotizable (hypnoscopic experiment: heaviness, anæsthesia and contracture of the whole arm), and often, *in the waking state*, divined the complaint of a stranger by simply touching his hand.

Having heard of many feats of this sort, I decided myself to investigate, so I asked her what disease she found in me?

"None; you are never ill; a slight congestion when you work too hard, but otherwise your health is perfect."

That was the exact truth. As a second test, I took her to one of my patients, a woman whose complex malady, though it presented lesions clearly characterized, still was not easily recognizable from the appearance of the patient. She had formerly had an attack of pneumonia, and there was hepatization of the right lung, chronic inflammation of the larynx, dorsal hyperæsthesia, frequent headache, several defects of circulation, dyspepsia, and intermittent general debility. Despite all this, the patient, thanks to her exceptional constitution, looked well, and no one would, on first seeing her, suspect her case to be so serious.

The somnambule, after touching the patient's hand, named pretty nearly all her maladies. She did not describe the lesions in sufficient detail, but with regard to the symptoms her diagnosis was very accurate. And more accurate still was her capital description of the patient's character and of her bad habits.

"On what do you base your inferences?" I asked. "Do you think that you see the organs that are affected?"

"No," she said; "rather I myself *feel* the symptoms of the disease."

And, in truth, I have seen her suffer and for a moment present certain morbid phenomena of another patient that she examined, but whom I did not know.

Her feeling the symptoms might be explained by *ideoplasty*, but even so, she would have to know them. And here it is that doubt begins. The somnambule did know the symptoms. But she was a very well-informed midwife, possessing a certain amount of medical knowledge

and a good deal of experience : hence she might well have had other guidance than that of a mystic faculty. After all, one or two experiments are not enough. On the other hand, however, I must admit that the somnambule then saw my patient for the first time ; that during the whole consultation she kept her eyes half-shut, and did not attempt to examine the patient according to any of the ordinary methods. As for the influence of the imagination in feeling the symptoms, that explanation becomes doubtful from the fact that the somnambule was not *suggestionable* at all, whether in the waking state or in somnambulism. She passed rapidly out of the aideic state into *active polyideism*, the latter resembling the waking state in all respects, save that it presented anæsthesia of the limbs.

I may cite, in connection with the fact here observed, a passage from the report read before the Paris Academy of Medicine, in 1831, by Husson : "We have found a somnambule that told us all the symptoms of the illness of three persons."

Was the case I have described one of mental suggestion ? I alone could know the condition of my patient ; the somnambule may have read it in my mind.

This hypothesis did not to me seem admissible, for the reason that no voluntary suggestion had been successful ; besides, it is better to hold to an explanation of a less extraordinary character—a *transmission of the symptoms of a disease*.

Is *that* possible ? I know not. I do not think we can hold with certitude the existence of a faculty whereby we directly *feel* all the peculiarities of another's pathological state ; and yet, a Paris physician has assured me that not only does he possess that faculty, but that he never needs any other means of diagnosis.

All that I can testify from my own experience is, that there exists another sort of nervic transmission, more general and less "circumstantiated ;"¹ and this, too, for a long time seemed to me untenable and absurd.

It is a popular belief of very ancient standing, that one may *give the pain* he suffers to another person, or even to an animal. Many a case of this kind have I heard of, and many a one more is mentioned in the writings of magnetizers and of a few physicians, but I will tell only of what I myself have seen and experienced. Here are the conclusions I have reached in my own practice :

1. The act of magnetizing, even when it is restricted to imposition of the hands, is much more exhausting than an act mechanically analogous.

2. This exhaustion is more marked when one magnetizes a sick person than when one magnetizes one

3. This nervous exhaustion,

is certain

special characters, is sometimes accompanied by a transmission of pain.

4. The kinds of pain that are most likely to produce this phenomenon are the "fulgurant" pains of the ataxic, rheumatic pains, and dorsal hyperæsthesia.

5. Prolonged contact facilitates this phenomenon, which, though more rarely, is manifested also as a sequel of magnetization without contact.

6. The transmission is rarely definite and immediate. Sometimes, not often, the pain visits the same part of the body, and this occurs particularly when one has to do with several patients, all presenting the same symptoms. But, as a general rule, it attacks the *modi minoris resistentiæ*, and manifests itself mostly the following morning at awaking.

7. Transmitted pains are always much lighter and of short duration.

8. Besides pains, certain pathological states, as congestions, cold in the head, insomnia, etc., may also be transmitted as a consequence of a magnetization. They are easily distinguished from an indisposition of spontaneous origin in the magnetizer himself, by their sudden appearance and disappearance, as also by their superficial character, so to speak. They do not bring with them the other consequences that belong to spontaneous pathological states.

9. The phenomenon is always accompanied by a notable relief to the patient whose disease condition is communicated. One might say that *the nervic equilibrium is established at the expense of another organism that is more in equilibrium*.

Hence, holding as I do that there is a more or less general transmission from the patient to the magnetizer, I cannot deny the possibility of a more explicit and more detailed transmission from the patient to a hypnotizable subject or one made hyperæsthetic by the methods of artificial somnambulism.

Two bodies of unequal temperature tend to equalize their temperature. Two bodies unequally electrized tend to equalize their electricity. Two bodies unequally equilibrated in their nerve functions tend to equilibrate those functions.

Comparison is not demonstration; yet it brings out an analogy, and that helps our ignorance a little.

And as for thought, does not that correspond also to a nerve state? Undoubtedly; nor have I ever denied the theoretic possibility of transmitting a psychic state, any more than I can deny the theoretic possibility of transmitting the human voice across the ocean—more particularly since a certain lesson in circumspectness I once got myself. In October, 1884, I was still fixed in the belief that, because of the radical antagonism existing in the microphone between the sensibility of its constituent parts and distinctness of utterance, we should

never succeed in reproducing speech in a loud voice ; and I held that a multitude of facts and strictly logical arguments justified that conclusion ; yet in October, 1885, I myself invented the *thermomicrophone*, which reproduces speech in a loud voice. So, then, let us repeat the wise remark of Arago, quoted at the beginning of this work, and proceed with our investigation.

Coming to Paris in 1882, I naturally visited everywhere, wherever anything relating to hypnotism was to be seen. One day I witnessed some hypnotic experiments at the house of a physician. After exhibiting all the wonderful feats of an hysterical young woman, duly trained, the physician gave me a surprise in the shape of an exhibition of mental suggestion. The experiment was made in this wise :

The somnambule having received the (verbal) order to go to the end of the room, she went thither, her eyes half shut, with the air of a school-boy that knows his lesson perfectly, then stood still, facing us. Then the doctor fixing on the subject a look of stern command, "mentally" ordered her to come back toward us (we were standing beside her bed). After a few moments of hesitation and impatience, the subject came back to us. The doctor turned to me with a smile of triumph, as though he were to say, "Isn't that astounding?" But the only thing that astonished me in the matter was the honesty of the experimenter, content with so little.

If when he questioned the subject whether she felt any sensation whatever in the legs, and she answered that she did, indeed, feel something, he took that as proof that this something was the result of "mental suggestion." Of course, these experiments could serve only to make me more incredulous.

With regard to "demonstrative" experiments, repeated for the benefit of the curious, I must here lay down a general rule that will, perhaps, seem over-rigorous :

One same experiment in mental suggestion, repeated under the same external circumstances, has no scientific value. When first made, it may possess the value of an isolated fact, but it possesses that value no longer when it is made a second time in the same way, and under the same conditions. Here is an example to show what I mean :

A curved finger may signify many things, or nothing at all. But if you make a somnambule in the state of suggestionable hypnotism believe that a parrot is perched on that curved finger, the next time you have only to hold the curved finger out toward the subject in the same way in order to make her at once see the parrot perched upon it.

This phenomenon is possible in the polyideic state : it is inevitable in monoideism, for then control is out of the question, and the subject does not think, cannot conceive but one single idea, and that idea you

inculcate directly or indirectly. In the case under consideration it is the inseparable *association* that completes the direct sensation.

Suppose the somnambule that comes back to where the doctor and I are standing, was, in the first instance, moved simply by impatience and a wish to return to her couch ; or suppose that there was some sort of real action : these alternative suppositions are of no account when the experiment comes to be repeated another day under the same conditions. There is already formed a more or less invincible association between the thought of being at the lower end of the room, the stern look of the doctor, the expectancy expressed by the faces of the lookers-on, and the intention to go to them.

This remark upon the importance of association by contiguity first, and afterward by habit, is very simple, yet it is too often lost sight of. I have, indeed, been astonished to see it disregarded by distinguished physiologists who have not the knack of psychological observation. So general is this disregard that it is become the sole cause of a multitude of entirely erroneous generalizations, which nevertheless are accepted in hypnology as principles.

For example, there is absolutely no essential relation between "open eyes" and catalepsy. Catalepsy can be produced with the eyes of the subject open, or half shut, or entirely closed, or in perfect darkness. But catalepsy may be induced by any sudden, lively impression that takes the subject by surprise. Suppose the subject on lifting his eyes is met by a bright flash of light, contrived beforehand by the "impressioner." He suffers the nerve-shock of this impression and instantly falls into the hypnotic state of catalepsy, and has not time even to close the eyes. That is enough ; there is formed an ideorganic¹ association between a sudden opening of the eyelids and the organic state of catalepsy. The brain being momentarily paralyzed, other ideas there are none, and consequently they cannot interfere with the forming of this association.

Lower the eyelids and the limbs grow relaxed : by suppressing the first term of the association you cause the other to disappear. If on the strength of this experiment you announce as an axiom that "catalepsy is produced by opening the eyes," or that "the subject in catalepsy keeps the eyes wide open," you make a statement that has no more value than if you were to say that "in catalepsy the subject keeps the eyes always closed," on the strength of another individual habit as easily producible.

To verify the cataleptic state the usual way is to raise the arm of the subject : if it falls, he is no longer cataleptic, else the arm would have retained the position you gave it.

Once I tried to produce catalepsy by a mental order, after ascer-

¹ Ideorganic (idea -|- organ) association ; an association between a thought in the mind and the action of a bodily organ. — *Translator*.

taining that the muscles were perfectly lax. Catalepsy appeared: the arm stood out from the trunk. I removed the catalepsy, to begin again; the arm fell. I mentally ordered the catalepsy to return; again it appeared; and so on. Had I any ground to infer that there was real mental action in this case? Not at all! Here is the true explanation of the phenomenon:

When experimenting for the first time upon the subject in question, I had produced catalepsy in the arm by lifting it with one hand while with the other hand I made a few passes (gentle massage) from above downward. It took several minutes to produce the lightness and mechanical flexibility of the member which constitute catalepsy.¹ But by repeating often I reached this result much more speedily; one pass along the arm was enough.

After this experiment I concluded that not even the one pass was necessary; there had been formed an ideorganic association between the act of lifting the arm and the cataleptic state. The one called forth the other; hence my mental suggestion played no part, and *I produced the catalepsy while trying to find out whether it existed.*

But, you will say, the same movement of the arm a moment ago showed a complete relaxation of the muscles; how, then, is it that the same movement suggests at one time simple paralysis (lethargy), and at another time the cataleptic state?

The reason is that the movement *is not the same*. We lift the arm in one way to make it fall, and in another way when we wish to see if it will not stand rigid. A slight difference in our state of mind suffices to give to our muscles and to our fingers a difference of motion and of touch that in hypnotism is quite sufficient to reproduce the organic association of catalepsy in one case, and not to reproduce it in another.

Our touch is of one kind when it is entirely without purpose, it is another thing when we *wish* to produce an effect; of one kind when we *have no belief* in its efficacy, of another when we have unlimited confidence. "Will and believe"—but you will then find phenomena that do not exist.

The unconscious, as I have said, is the great præstigiator in hypnotism, and many a trick it plays upon us. But, I must add, it rarely does so dishonestly. It is, on the other hand, perfectly docile, and never was animal more easily trained than it is. The misfortune is that we train it all unconsciously and without appearing to do so.

Then it is that the unconscious of each of us disports itself in playing tricks on each other one—and upon ourselves.

In the two instances just cited, I postulate a *really active intermediary*—a bright flash of light and a gentle massage—but these are not essential; the unconscious can divine your thoughts without them,

¹ *Cette légèreté et flexibilité mécanique du membre qui constitue la catalepsie.*

provided you remain steadfast in your wish. You lift the subject's arm, and it falls ; try again, and the subject will perhaps hesitate, and the arm will drop to his side less quickly ; keep on, and probably the unconscious will say to itself : " Evidently they want me to maintain the posture they give to the arm. I am willing." And you will get your "cataleptic state" without any accessory manipulation.

It is in this way that certain magnetizers have found a number of "polarities" in the human body. I have seen their experiments, which are quite convincing : the thumb attracts, the little finger repels, and so on. The unconscious having learned its lesson, no longer contradicts itself. Yet, if you use a little entreaty—albeit, without any words—you will easily obtain the opposite result, and you will get any polarity whatsoever, according to whatever fanciful plan you may lay out in advance. Three seances are enough to *produce a habit of re-action*.

(Of course, these remarks do not settle the question of polarity in general. Upon that question I do not mean even to touch. I merely say that it is possible to inculcate into the subject an imaginary polarity.)

Even when you experiment without contact, even when you act upon a sleeping person, *who, however, has already been magnetized by you*, you must be on your guard against unconscious habitudes.

The possibility of producing somnambulism in a person that is in natural sleep, and who has no suspicion of your presence, is often cited as proof of *fluidic action*, or mental action at a distance. But in most cases this, too, is an illusion, and when the experiment is successful, proves one thing only, to wit, *the force of ideorganic associations*.

You have the habit—perhaps quite unconscious—of disturbing the air in front of the subject's face, when you make passes in a peculiar way of your own. The subject, or rather his unconscious, divines your presence, feels you are there, obeys you ; the association of *these impressions* with the organic state of somnambulism produces the somnambolic state. Try some *new* method—one that would have been equally effectual in the waking state, because of the conscious suggestion—and *you will obtain no result*.

In purposely employing the principle of association, we come upon curious applications of it. You choose whatever link of association you please, and connect that with one, two, three, four or more similar links, be they ideas, sensations, acts, states or whatever you will. It is not necessary that there be any logical relation at all between the first link and the ones that follow.

I once had as a patient an insane woman, fully bent upon suicide, but who always very carefully planned in advance the carrying out of her projects. In the normal state she never would tell me about them, and by degrees she became mistrustful even in somnambulism. The

monoideic state, which is always characterized by absolute submission, it was almost impossible to produce, and the most trivial question made her pass straight from the *aideic* state to *active polyideism*, in which she regained her independence. Still it was necessary to learn her secret in order to prevent mischief. To this end I contrived the following ruse. Having been in the habit of sitting on the right whenever I talked with her, one day I sat to the left of her, and taking advantage of a favorable moment—a sort of visional delirium akin to monoideism—I changed my voice slightly, and made answer to her raving, taking care to be agreeable to her. The conversation went on, and I saw that she did not recognize me, though now she was fully in the state of active somnambulism. She began to unbosom herself to me, and soon she confided to me her inmost thoughts.

"But who are you?" she suddenly asked, "and what right have you to question me?"

"Oh, you know me well. I am your old friend and devoted confidant for whom you have no secrets. How, have you forgotten Mr. Camille, your good Mr. Camille?"

"That's a funny name," said she, "but no matter."

Thenceforth *I had only to station myself on her left* in order to possess her confidence. There I was called Mr. Camille, while on her right I was still her "doctor." The thing was understood and there was no longer any need for me to change my voice or my position in any respect. I was transformed; but at the same time she also underwent a transformation, and she was no longer the mistrustful, circumspect person she was before. (She was saved from suicide thrice by this ruse.)

Suppose now that I had wished to give a deceptive demonstration of the force of a complex mental suggestion—changing my personality in the mind of the subject, without a gesture, without a word; changing my name; changing her attitude, her feeling toward me; "mentally" ordering her to confide in me.

To perform that marvel, all I should need to do would be to stand on the left of her.

Well, these things happen involuntarily through ignorance of the mysteries of association. We believe ourselves to be candid observers, the while we are unconsciously suggesting the phenomenon that is to be verified. Thus it is that the somnambulatory subjects of the "fluidist" magnetizer see the fluid emanating from his finger-tips, while the somnambles of the hypnotizer see nothing, and those of the spiritist discover spirits everywhere, the same being invisible for the somnambles of the materialist. So it is, once more, that "pressure on the top of the head" produces, at Paris, the "somnambulatory;" at Breslau, the "lethargic" state; at Manchester, "religious ecstasy," and so on. It is all "the story of Mr. Camille!"

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Well, these things happen involuntarily through ignorance of the mysteries of association. We believe ourselves to be candid observers, the while we are unconsciously suggesting the phenomenon that is to be verified. Thus it is that the somnambulatory subjects of the "fluidist" magnetizer see the fluid emanating from his finger-tips, while the somnambles of the hypnotizer see nothing, and those of the spiritist discover spirits everywhere, the same being invisible for the somnambles of the materialist. So it is, once more, that "pressure on the top of the head" produces, at Paris, the "somnambulatory;" at Breslau, the "lethargic" state; at Manchester, "religious ecstasy," and so on. It is all "the story of Mr. Camille!"

provided you remain steadfast in your wish. You lift the subject's arm, and it falls ; try again, and the subject will perhaps hesitate, and the arm will drop to his side less quickly ; keep on, and probably the unconscious will say to itself : "Evidently they want me to maintain the posture they give to the arm. I am willing." And you will get your "cataleptic state" without any accessory manipulation.

It is in this way that certain magnetizers have found a number of "polarities" in the human body. I have seen their experiments, which are quite convincing : the thumb attracts, the little finger repels, and so on. The unconscious having learned its lesson, no longer contradicts itself. Yet, if you use a little entreaty—albeit, without any words—you will easily obtain the opposite result, and you will get any polarity whatsoever, according to whatever fanciful plan you may lay out in advance. Three seances are enough to *produce a habit of re-action*.

(Of course, these remarks do not settle the question of polarity in general. Upon that question I do not mean even to touch. I merely say that it is possible to inculcate into the subject an imaginary polarity.)

Even when you experiment without contact, even when you act upon a sleeping person, *who, however, has already been magnetized by you*, you must be on your guard against unconscious habitudes.

The possibility of producing somnambulism in a person that is in natural sleep, and who has no suspicion of your presence, is often cited as proof of *fluidic action*, or mental action at a distance. But in most cases this, too, is an illusion, and when the experiment is successful, proves one thing only, to wit, *the force of ideorganic associations*.

You have the habit—perhaps quite unconscious—of disturbing the air in front of the subject's face, when you make passes in a peculiar way of your own. The subject, or rather his unconscious, divines your presence, feels you are there, obeys you ; the association of these impressions with the organic state of somnambulism produces the somnambulist state. Try some *new* method—one that would have been equally effectual in the waking state, because of the conscious suggestion—and *you will obtain no result*.

In purposely employing the principle of association, we come upon curious applications of it. You choose whatever link of association you please, and connect that with one, two, three, four or more similar links, be they ideas, sensations, acts, states or whatever you will. It is not necessary that there be any logical relation at all between the first link and the ones that follow.

I once had as a patient an insane woman, fully bent upon suicide, but who always very carefully planned in advance the carrying out of her projects. In the normal state she never would tell me about them, and by degrees she became mistrustful even in somnambulism. The

monoideic state, which is always characterized by absolute submission, it was almost impossible to produce, and the most trivial question made her pass straight from the *aideic* state to *active polyideism*, in which she regained her independence. Still it was necessary to learn her secret in order to prevent mischief. To this end I contrived the following ruse. Having been in the habit of sitting on the right whenever I talked with her, one day I sat to the left of her, and taking advantage of a favorable moment—a sort of visional delirium akin to monoideism—I changed my voice slightly, and made answer to her raving, taking care to be agreeable to her. The conversation went on, and I saw that she did not recognize me, though now she was fully in the state of active somnambulism. She began to unbosom herself to me, and soon she confided to me her inmost thoughts.

"But who are you?" she suddenly asked, "and what right have you to question me?"

"Oh, you know me well. I am your old friend and devoted confidant for whom you have no secrets. How, have you forgotten Mr. Camille, your good Mr. Camille?"

"That's a funny name," said she, "but no matter."

Thenceforth *I had only to station myself on her left* in order to possess her confidence. There I was called Mr. Camille, while on her right I was still her "doctor." The thing was understood and there was no longer any need for me to change my voice or my position in any respect. I was transformed; but at the same time she also underwent a transformation, and she was no longer the mistrustful, circumspect person she was before. (She was saved from suicide thrice by this ruse.)

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Robert-Houdin long ago contrived a means of imitating "second sight." He trained his assistant—who played the part of the medium—so readily to understand his questions, that the latter always "saw" from a distance objects held in the hand, even when the hand was closed. If the question was "What do you see?" it was a coin. The question "What do you see *now*?" indicated a gold coin, and so on. Robert-Houdin could even convey to his subject, "mentally," the number of a bank-note simply by means of questions, the secret import of which was understood between them.

One often imitates this trick unconsciously when one, in thinking of a given phenomenon, has the habit of questioning the subject always after the same fashion.

Sometimes habit even is unnecessary, and one succeeds *ex tempore*, even in the waking state. I have often made the following experiment:

I lay a walking-stick on the ground, and say to a person that is hypnotizable, though not hypnotized: "Pass this limit if you please." The subject does so. "Once again!" He steps over the cane hesitatingly, and looks at me with mistrust. "And again!" He stands stock-still quite unable to step over the cane; his legs refuse to carry him.

Did I say that this was going to happen? No! Did I make any gesture whatever? No! I simply *willed* and *believed*. Then it is a case of mental suggestion? By no means—only *a suggestion guessed*.

Cumberland, the famous "mind-reader," came to Paris in 1884. It will be readily understood that, after having made the experiments already described, I could not be under any illusions with regard to the apparent thought-transference exhibited by him. Mental suggestion has nothing to do with his performances, but it is interesting and highly instructive to read the first reports of the newspapers. There we may see the difference between the experiments as performed, and as described, even when the performances are described by scientific chroniclers. There, too, we learn how small is the value of testimony when there is a question of a new and unknown phenomenon.

Having clearly perceived that the true medium in these performances was he who "thought," not he who guessed, I repeated Cumberland's experiments, and I published a series of articles on the subject in the *Gazeta Polska* ("Polish Gazette"), in May, 1884. Since that time the matter has been sufficiently elucidated in France, by the researches of Messrs. Gley and Ch. Richet, and I have only to formulate my own observations in order to complete theirs, without recounting the experiments in detail.

It is certain, then, that every thought having any relation whatever to space tends to produce unconscious movements indicating such relations. That is a habit, a nerve mechanism, in part hereditary, in

part acquired. In the case of an object hidden (to be found by the "mind-reader"), or of a person chosen (whom the mind-reader is to point out), one is thinking of the place where the object or the person is, and one simply *leads* the mind-reader who holds one's hand. One needs only to practice for one evening to perform the feats of the famous mind-reader; for notwithstanding all the extravagant stories that have been published about the matter, it does not even involve any special fineness of touch, no nice perception of pulse-changes or of imperceptible vibrations. *One must be able to go whither one is led*; that is all. The comic side of the thing is that one has not the slightest suspicion of what one is doing, and that people pay twenty francs to see a person point out an object they themselves have hidden. The melancholy side, on the other hand, is that our contempt for the "occult sciences" has rendered us ignorant of highly remarkable and highly instructive physiological phenomena, to that degree that we stupidly cry "Fraud!" when some simple, common fact is shown to us that ought long ago to have been studied and ascertained.

It has been necessary for a bold professional to traverse all Europe, playing tricks upon diplomats and princes of blood royal, in order to make science take account of the relations between "the physical and the moral." And it was the same with hypnotism, which would to this day not have been recognized by science had it not been for the public exhibitions given by Donato and Hansen.

In these experiments the one who leads you knows not what he is doing, the while thinking himself quite master of himself. I have known a very intelligent and highly educated lady with whom I could find a needle in a haystack. She would lead me with such certainty and with such force that resistance was out of the question. Once a little note was hid under a flowerpot. She indicated to me the flowerpot, and I began to feel about within it; then, with her hand, which I held loosely in my own, she made a negative gesture perfectly intelligible, and then another which said: Underneath!

Now, that lady not only was entirely unconscious of this expressive conversation, but she never would believe that it was by her unconscious motions that I was guided in the search.

"No," she would say, "that is impossible. You read my thought; I was very careful this time not to make any motion whatever." She was a person easily hypnotizable (hypnoscopic experiment: heaviness, paralysis, numbness).

There are some 60 persons in 100 with whom Cumberlandism succeeds more or less readily; thus, they are more numerous than hypnotizable subjects, who are not more than 30 in 100.

Usually the experiments are more successful with hypnotizable

persons. Nevertheless, there is a certain number of the latter—even of the best subjects—with whom you never will succeed. Why? Because the conditions of success in Cumberlandism are twofold:

1. An organic tendency to a duplication between the voluntary and the involuntary movements, which characterizes the majority of hypnotizable subjects.

2. A facility in concentrating one's thoughts and keeping up the concentration, which quite naturally and of necessity produces in every one this duplication.

Now, among non-hypnotizable persons there are some who possess this latter faculty in a high degree, while, on the other hand, it is sometimes lacking in persons easily hypnotizable, but who cannot concentrate their attention. When they pass forment a person, they think of that person; but when they perceive a mirror they think of the mirror, and plainly the muscular indications become confused. Yes; there are persons easily hypnotizable who are incapable of concentrating their attention—a thing, be it said in passing, which contradicts Braid's theory.

In general, Cumberlandism rests upon the same physiological basis as "willing," though the external conditions are altogether different. In "willing" it is by the will that we seek to make the person we touch perform a given movement, and then we involuntarily impel him to its performance. In Cumberlandism, on the contrary, we have no such will, we simply think of a place—but we lead the subject all the same. At bottom the same principle is found in both; an *ideo-plasty of movements* (realization¹ of the movements we think about) and, from the point of view of the one who guesses, a *mechanical suggestion*.

It is still a long way to mental suggestion. Yet these are the experiments that have contributed most to awaken in the minds of some physiologists the thought of studying true mental suggestion.

CHAPTER II.

PROBABLE MENTAL SUGGESTION.

SUCH were my judgments, such my doubts, when, in the month of March, 1884, I received from a well-known physician of Nice a letter, in which occurred the following passage:

"To-day I met a young man of 24 years, intelligent and educated, who wishes to be of service to science, and in whom can be produced, *in the waking state*, suggestion phenomena by word and *by thought*.

¹ Or actualization.—*Translator*.

He is a noctambule from childhood ; so have been or are his mother, his maternal grandfather, and his maternal uncle. I have been able to make a few experiments with him. I imagined seeing a bird flying hither and thither in a room : I touched him and he saw the bird flying about in every direction. [Here follows an experiment in color-changes by *verbal* suggestion, which does not concern us.] He appears to be a little more sensitive on the left side of the body [than on the right]. I must see this subject again, for he is a very remarkable one.

[Signed]

A. BARÉTY."

As the details of the experiment were not stated with precision, I was justified in supposing that the *questions* of the experimenter, and his *attitude*, might have suggested to the subject the hallucination desired. In fact, to suggest to the subject the idea of a bird flying, one need but look round the ceiling and ask if he does not see something in the air. And had details of what he saw been asked for, it is probable that the bird seen by the subject would be found very different from that imagined by the experimenter. Some weeks later I received a second letter, containing more details :

"Since my last letter was written, I have seen again the subject of whom I have spoken to you. He is in the hands of a magnetizer, with whom he came to see me. I have on my desk two statuettes, one bronze, the other ivory ; these I placed side by side, three or four inches apart, and upright. Then I said to the subject : 'Look at these two statuettes ; what is their color ?' He answered : 'One is white (that on the right) and the other is dark.' Then placing my left hand in his right, I asked if he saw anything peculiar in looking at the two statuettes. As for me, I had *imagined* or strongly conceived the thought of the white one *quitting its place and becoming one with the brown*. He answered, after a few minutes, that the white statuette *left its place* ; that it transferred itself *to the other side* of the brown. That was a little more than I had thought.

"Next I imagined (always without making the slightest sign) the statuettes *growing smaller*, and (my right hand being placed in the right hand of the subject) I asked him what he saw. He answered that he saw the statuettes growing smaller and smaller, till they were no bigger than a pin-head. In reality, they are each about five inches in height.

"Then I thought of them growing larger, and, *without my questioning him*, he told me that now he saw them growing larger and larger. He even lifted his head to follow this increase in their size, and seemed quite surprised at it. Imaging to myself, then, the statuettes growing smaller till they resumed their proper dimensions, I was told by the subject that he saw them growing smaller."

Here I interrupt the quotation to make some remarks. This experiment is certainly a good deal more important than the previous one. But it is far from being conclusive. First, the thoughts of the subject were fixed in advance, and limited to "something" about to happen to the statuettes. What could happen to them ? A change of color ?

Experiments on color changes had already been made in the preceding seance. The statuettes might change their places. The subject had this thought, but was a little "out" as to details. They might grow bigger. This the subject guessed. What association comes nearest to increased size? Diminution. This, too, the subject guessed. After the reality is falsified in two opposite respects; one, as a matter of course, feels the need of restoring the true state of things as they appear to our senses, and it is probable that the experimenter and the subject had this thought simultaneously. We need to know not only the details of the experiment—which has been described carefully—but also the conversation that went before, and all the conditions of the moment, in order to be sure that a train of associations and the *psychic atmosphere* were not the sole cause of the successful issue.

Such, in substance, were the observations that I made to the experimenter, and he was pleased to recognize the pertinency of a certain number of my objections. We may now return to the letter :

"After this experiment (writes Dr. Baréty), I made another and very interesting one on making him *find a hidden object*.

"Having made him *turn his head away entirely*, I took the ivory statuette and concealed it in my right hand, which I placed upon my hip. My left hand was not at this time in contact with his hand as it was before.

"I asked him to face about and look at the statuettes, which he immediately did. But, as he showed no surprise, I asked if he saw them both. He answered yes. Then, I said, 'Well, then, take the white one in your hand' He put his hand forth to where the ivory statuette had stood before, and seemed to bring it toward him and to examine it. But presently he moved his fingers as though conscious that he was grasping only a shadow, or that the object was vanishing. 'Where is it? What is become of it?' Forthwith he directed his eyes toward my closed right hand, placed on my hip (a position in which I had held that hand before seizing the object), and said to me, 'What have you in your right hand?'"

So far, I still see nothing but a transient hallucination, and an inference that easily enough may have been suggested by the immobility of the experimenter's closed right hand, which the subject, perhaps, for the first time noticed at the moment of his search. But let us return to the letter.

"I then asked him to turn and look in the opposite direction [an insufficient precaution, for it gives assurance to the subject that nothing is taken to any distance away], and then rapidly and noiselessly I hid the statuette in my waistcoat. Then I again placed my closed hand upon my hip as before. I bid him turn round and tell me quickly where the white statuette was, and to get it. He thereupon made his right hand perform a most singular movement. First he carried his hand to the spot where the statuette had originally stood, then, always slowly, he guided it toward the waistcoat, passing nigh to the hip

(where I had before held the statuette concealed in my hand), and following the track of the statuette.

"In conclusion, I repeated the experiment of increasing and diminishing the size of the statuettes *without my hand being in contact with the subject's, at the same time concealing my eyes*. It was a complete success. This last experiment seems to me very convincing. What think you of it?"

Yes; more convincing than the first, but unfortunately it was the *second*, repeated under the same conditions; consequently it is open to the doubts formulated above with regard to repeated experiments in general.

But while I raised these objections I was deeply interested in Dr. Baréty's experiments, and I sent to him a great many questions which I asked him to resolve experimentally. As for the experiments in finding a hidden object, when the subject followed exactly the track of the object itself, I frankly told the doctor that I did not understand them at all.

What was needed was a more systematic, a more rigorous, study of the matter. This Dr. Baréty knew as well as I, but unfortunately circumstances were adverse. Then, too, perhaps it was an excess of incredulity; but when there is question of an experiment in mental suggestion, I put no trust in anybody but myself. Besides, have I not told of a case in which I was myself deceived by an unnoticed circumstance or an unsuspected psychic mechanism? Nor is it out of presumption that I depreciate the testimony of others, who perhaps have taken precisely the same precautions I would myself have taken; but in matters like this it is impossible to recount all the little details that are essential for a full understanding of the situation, and conviction does not flow from the final result nor from the general conditions; what produces conviction is certain peculiar circumstances, the impression on the observer's mind, his personal sense of the impossibility of explaining the thing otherwise than by a direct psychic action.

I was therefore very glad to learn a month afterward that the subject and his magnetizer were about to come to Paris. I gave a good deal of time and study to planning experiments, and a seance was held in accordance with a programme drawn up jointly by Dr. Baréty and myself.

I commenced with the *hypnotic experiment*. It showed the subject to be a person of enormous sensibility: there was contracture and almost instantaneous insensibility of the whole arm. And this phenomenon could be produced or suppressed purely by verbal suggestion.

I wished at first to leave his habitual magnetizer, Mr. R., entirely at liberty, reserving to myself the right to make the experiments again

under different conditions. When one seeks to verify a phenomenon about which he knows nothing, one must not impose upon it at first a lot of conditions that may interfere with success, and yet, for all that, may not disprove the principle one is investigating, and the true nature of which one does not know.

"What results do you think you can produce with your subject?" I asked the magnetizer. He recited a whole litany of phenomena, out of which I selected the following three: 1.—Sympathic and attractive action on the right side, antipathic and repellant action on the left. 2.—Paralysis produced from a distance. 3.—Finding hidden objects.

"Do you think you can obtain with your subject any direct transmission by means of your thought alone?"

Much to my astonishment, the magnetizer replied in the negative. Yet that was the object of our meeting!

"I must use gestures," he said, "except in the third experiment, which can be performed without my taking any part in it. But I cannot guarantee thought-action pure and simple: with regard to that I am not at all sure."

What matters it? We will make the attempt all the same, as Dr. Baréty thinks he has succeeded often.

I shall not need to recount the details of the first experiment. Evidently—and R. himself shared in this opinion—it was simply the result of hypnotic training. It is "the story of Mr. Camille" once more, and it does not even prove the independence of the two cerebral hemispheres.

Second Experiment.—The subject turns his back to the magnetizer, who is in another room at the distance of about 25 feet. Dr. Baréty stays with the subject, I watch the magnetizer. The subject is counting aloud. At a signal from me the magnetizer "projects the fluid" with all his might. The subject ceases to count—he is paralyzed.

This experiment succeeded three times consecutively. I thought I noticed, however, that the magnetizer's cuffs were too noisy.

I now remained in the room. I walked up and down to prevent the subject from hearing the magnetizer's gestures. The experiment was a flash in the pan, that is to say, there was a delay of several numbers.

As the magnetizer was acting in perfect good faith, I asked him to take off his cuffs. Check again. We began once more, and now, though the magnetizer, at my request, made his gestures as noiselessly as possible, *the experiment was successful.*

Conclusion: Direct action was not proved, but no more was it disproved. But if direct action is to be admitted, there was reason to believe that the auditive impressions *assisted* in producing the phenomenon.

Third experiment.—This time something really new was presented. The procedure was as follows :

In the first place, every precaution was taken to avoid illusions.

An object of any sort was chosen—a book, for instance—which was placed on a table. (In this experiment the selection of the object is not important.)

The subject and his magnetizer being absent, I take this book in a direction chosen by myself, and hide it in a nook in the room not easily guessed. (I make an accurate sketch of the route taken by me in removing the book.) Baréty and I know where the book lies, but we take such positions in the room as to prevent our influencing the subject by any involuntary sign.

The subject is brought in blindfolded. The place on the table where the object formerly lay is indicated to him, but without naming to him the object. The subject is not asleep, but it becomes plain, as the experiment proceeds, that the concentration of his attention produces in him a state of super-excitation that is almost hypnotic. He begins by feeling of the spot indicated. He knows not what the object is, does not guess what it is, yet, strange to say, his fingers as they grope describe the contour of a book. One might say that the ghost of the book offers a resistance to his fingers. Having made sure of the form of the object and of the place it occupied before, he essays two or three directions, always *groping in the air*, and takes the true one. This he follows slowly, misses it twice or thrice, retraces his steps, goes on with greater confidence, and in three minutes finds the book. We say nothing, but he assures us that this is the object we had hidden.

I made a sketch of the path he took. On comparing the two lines, the second is found to be a little more curved.

In another experiment I purposely made two unexpected declinations ; the track of the subject was straighter than mine.

Here, again, is something extraordinary : I selected as the object to be hidden a powerful magnet (the hypnoscope), without letting the subject know. He comes in, feels of the place where the magnet had lain, and stands motionless. "I cannot go on," he said ; "my fingers are become stiff." In truth, there was a contracture not only of the fingers, but of the whole forearm. I was much surprised, but by means of gentle massage, without uttering a word, I freed him from the contracture and induced him to proceed. On reaching the mantel-shelf, on which was the magnet, hid in a vase, the same phenomenon was seen. "It is there," he said, "but again my arms are stiff." He showed great fatigue at the conclusion of each experiment.

I shall now be asked, What is the solution of the enigma ? All that I can say is :

1. All the experiments were successful, or nearly so.

2. There was no mental suggestion, or if there was, it played a secondary part.

3. The principal rôle was played by the subject's *tactile sensations*, which were exceedingly acute.

4. The object chosen might be "magnetized" or not, and taken to the hiding-place by an unknown person, and consequently neither the individual "fluid" nor certain olfactive emanations come here into play, or at least they are not necessary.

5. Unless we admit mental suggestion or the reality of a "dynamic ghost" (*spectre dynamique*) left at the place where before the hypnoscope lay, it must be confessed that in this case no scientific explanation whatever is possible.

6. Between the transfer of the object and the performance of the experiment it was essential that only a few minutes should intervene; else the "trace" of the object through the air vanished.

I may mention a few additional points of interest :

When questioned with regard to his own sensations or opinions, the subject told me that he considered the phenomenon as the effect of a *special tactile sensibility acquired by practice*. "When you are in a bath," said he, "you feel distinctly the difference in density of the two media, water and air. The water offers a greater resistance to your movements than does the air. Now, I have very much the same sensation in the air that an object has traversed; it is for me *more rarefied, it offers me less resistance*, and it is this less resistance mainly that guides me. I cannot tell you anything more about it. I do not feel quite master of myself in making this experiment, and the certainty of success depends precisely upon the degree of this peculiar state. I then feel *isolated* from all around me, I hear nothing, I exist only in my fingers, which, however, work without me. The more I reason the less do I succeed."

As for the experiment with the hypnoscope, evidently we must suppose that the presence of the instrument *magnetizes* the air for a certain time, or at least produces an electric change that we are unable to define. This supposition accords with Reichenbach's researches, which perhaps are worth repeating in spite of the non-success of the experiments mentioned in the beginning of the present study.

We decided to make a further test of the direct action of thought upon the subject. Touching him with my hand, I imagined to myself some object—its shape, color, feel. In this case the subject either saw nothing at all, or something very indefinite.

Setting before us a leaf of white paper, I imagined to myself a round yellow spot. The subject saw something gray. Again I imagined a black cross; he saw a round spot.

It appears that Dr. Baréty was more fortunate than I, and that with him the subject twice or thrice guessed the color that the doctor

had in mind, or at least the complementary color. But there was nothing decisive in these experiments—such, at all events, was my personal impression.

The following year (1885) Charles Richet published his remarkable essay in Ribot's *Revue Philosophique*.

He was inspired by an idea that I find to be at once simple and ingenious, and which may, I think, be stated as follows :

There are in physiological phenomena, no absolute limits—only a gradation. Consequently, if mental suggestion exists in an exceptional degree in some privileged subjects—and that remains to be proved—it must needs exist in a degree more or less inappreciable in everybody. That which in an isolated fact is inappreciable may be rendered appreciable by bringing isolated facts together. Statistic may light up an effect previously not noticed, and the calculus of probability readily shows how much belongs to chance and how much to a real agent. Thus one can find a rational, a premonitory (excuse the term !)¹ basis, before he attains direct proof of an extraordinary fact.

Mr. Richet set about making experiments (easily repeated with everybody) and grouping them, and reached the interesting conclusion that in cases where mental suggestion possibly was added to chance, there was always a slight surplus of successes. Here is a summary of the results obtained :

SUCCESSES.		
	Probable.	Actual.
1. In 1833 experiments with playing-cards.....	458	510
2. " 218 " photographs, etc.....	42	67
3. " 98 " a rod.....	18	44
4. " 124 spiritist experiments, so-called.....	3	17
	<hr/> 521	<hr/> 638
2,273		

That is to say, in all these experiments there was a surplus in favor of suggestion.

I have repeated the experiments with playing-cards with four non-hypnotizable persons, and found the results very much the same. In order to be able to compare them, we must observe that for Richet's 1833 experiments the calculated probability was 0.250, and the actual proportion 0.278—a surplus of 0.028 in favor of mental suggestion. Now here are my figures :

SUCCESSES.			Proportion of Actual.
	Probable.	Actual.	
C. R. 92 experiments.....	23	22	0.239
M. K. 30 "	7	7	0.250
B. A. 50 "	12	15	0.300
M. A. 107 "	26	32	0.299
J. O. 49 "	12	16	0.329
	<hr/> 80	<hr/> 92	<hr/> 0.283
328			

¹ *Prémonitoire*. The meaning is obvious. The author it is that begs the reader's indulgence for using the word.—*Translator*.

That is to say, the proportion of successes was 0.283, supposing mental suggestion, while it was but 0.250 according to the calculus of probability, and 0.240 according to comparative experiment without suggestion—a difference of 0.033 in favor of the hypothesis.

These figures, it is seen, are even higher than those obtained by Richet; but the number of my experiments being much smaller, it is probable that were it increased the differences would be equalized.

In another series of experiments with another person (also non-hypnotizable, but very nervous and easily impressionable), upon guessing only the *color* of the cards, I obtained a difference still more marked in favor of suggestion, thus:

Without mental suggestion.....	0.42
By calculus of probability....	0.50
With mental suggestion.....	0.60

A surplus of $\frac{1}{10}$. Mr. Richet thinks that experiments on the *color* of a card are inconclusive, because of a large influence of chance, which, with the probability of $\frac{1}{2}$, must efface the very slight influence of suggestion. That would be true *if the suggestive influence were absolutely the same in both cases*. But I do not think it is so.

The difference between *red* and *black* being clearer and simpler than the difference between *spade* and *club*, or between *heart* and *diamond*, the imagination of the subject ought to receive more readily a suggestion of the former than of the latter. Does not Mr. Richet himself say that, with a smaller chance, $\frac{1}{2}$ for example, for a full designation of the card "the conditions of suggestion are *bad*, as if the selecting from among 52 cards were too large a matter for suggestion to act clearly?" The remark is very just; but then *a fortiori* suggestion ought to act still more clearly when there is a question merely of a color.

From all his experiments, Mr. Richet infers the *probability* of the following propositions:

1. *The thought of an individual is transmitted without the help of external gestures to the mind of an individual placed near him.*
2. *This transmission takes place in different degrees in different individuals; it is also extremely variable in the same person.*
3. *This transmission is usually unconscious, in that it acts rather on the unconscious intelligence than on the conscious intelligence of the individual perceiving and of the individual transmitting.*
4. *In healthy adults who are not hypnotizable, the degree of probability of this transmission hardly exceeds $\frac{1}{10}$ (we have seen that under exceptional circumstances it may amount to $\frac{1}{10}$).*
5. *The general probability in favor of suggestion may be represented by $\frac{1}{18}$.*

The personal impression that results from all these experiments is as follows: the method is not of a kind to produce conviction; but if mental suggestion is a fact, this method has rendered a valuable

service to the cause by establishing for it a basis of probability, a real ground to stand on, and by awakening the curiosity of investigators.

Were it not for Mr. Richet's work, I should probably never have reverted to this unfruitful study and its manifold illusions. What induced me to persevere was the following passage :

"All my experiments (says Mr. Richet) were made upon non-sensitive persons, as my friends and myself ; it will be interesting to know what effect they have on persons really sensitive, hypnotized, hypnotizable, hysterical, nervous, or trained by long practice in the perception of suggestions. Unfortunately I have had no opportunity to make *such* research, as I have not had at command a sensitive subject."

As one has only to provide himself with a hypnoscope and to enter a company of a score of persons, in order to find a good subject, I undertook a series of experiments for the purpose of verifying those made by the Society for Psychical Research, of London. Here are the results of my first seance :

The subject, Mrs. D., is 60 years of age, hypnotizable. (Hypnotic experiment: heaviness, paralysis, analgesia.) Chronic articular rheumatism, very strong constitution, very robust, remarkable intelligence, accustomed to literary work, a good deal of erudition, internal impressionability, without external signs ; psychically active temperament, but quiet ; of exceedingly gentle disposition. Her back is turned toward us. Mrs. P. and myself think of an object while we touch the subject ; the latter is informed that the object is

A Playing Card :

OBJECT THOUGHT OF	OBJECT GUESSED
1. Six of spades. (Prob. = $\frac{1}{4}$).	Six of black.
2. Ten of spades.	Red, not black, a ten-spot.
3. Knave of hearts.	Red, a king? A queen?

A Color :

4. White.	White.
5. Yellow.	Yellow.
6. Black.	Black.

Any Object :

7. A lamp.	A book, a cigar, paper. Result=0.
8. A silk hat.	Something blue, light. " "
9. An armchair.	A sugar-bowl, bureau, a piece of furniture. Result=0.
10. Salt.	A taste of salt.

A Letter :

11. Z. (Prob.= $\frac{1}{26}$) ¹ .	I. R. S. Result=0.
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A Person :

12. Valentine.	Valentine.
13. Mr. O. (myself.)	Mr. D., Mr. Z. Result=0.

¹ *Sic.* But as the number of letters in the French alphabet is 23, the probability would seem to be one in 23, not one in 34.—*Translator.*

A Portrait :

OBJECT THOUGHT OF	OBJECT GUESSED
14. The Bishop. (Prob = $\frac{1}{4}$).	It is the Bishop.

A Digit :

15. 8.	7, 5, 2, 8. Result=0.
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An Impression :

16. Joyful.	Sad. Result=0.
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Any Figure :

17. A black cross.	A tree, crossed branches. Result=0.
18. A long-bearded old man.	A man, bearded, white beard.

A Photograph :

19. Of a boy. (Prob. = $\frac{1}{4}$).	A girl, children. Result=0.
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A Name :

20. Marie.	Marie.
21. Adam.	Jean, Gustave, Charles. Result=0.

A Number :

22. Ten.	Six, twelve, nine, ten.
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Any Object :

23. A book bound in blue satin.	Violet color, pink. Result=0.
24. Gold pencil case on a blue ground.	Something black on blue. Result=0.
25. Ace of spades on a black ground.	Something black, blue, a card, ace of clubs.

A Musical Instrument :

26. A trumpet.	The violin. Result=0.
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A Digit :

27. Three.	2, 5. Result=0.
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An Object in the Dining-room :

28. A plate with figure on it.	A plate with figure.
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A Taste :

29. Of salt.	Sour, bitter. Result=0.
30. Of sugar.	Sweet.
31. Of strawberries.	Of an apple, grapes, strawberries.

The subject was visibly fatigued, and we interrupted the experiments.

I was much surprised. Of 31 experiments at least 13 were entirely successful, though often the probability was exceedingly small ; even the misses in some cases presented evident analogies. And hardly 12 out of the whole 31 could be regarded as absolute failures. The first three, for example, though not entirely exact, plainly uphold the probability of suggestion.

One doubt alone troubled me. I have already explained what I call the *psychic atmosphere*. All the objects thought of, except a few cards drawn at random, were chosen during the seance by myself or

by Mrs. P. Now, it well might be that we were all three quite unconsciously borne along, so to speak, by a current of associations. This supposition may seem improbable, but in making it I had in mind a prior experiment of my own that was truly astonishing.

There were five or six of us staying with friends in the country. We amused ourselves as we could; among other things by playing tricks with cards. Then we passed to guessing. Having by chance twice or thrice guessed a number chosen between 0 and 6, and several cards chosen mentally, I thought I noticed that after repeated experiments there was set up in our minds a mechanical series of cards or of numbers, based on contiguity, likeness, or contrast, and that this gave me a *presentiment* of the card or number to be selected immediately. I had only to give the rein to this unconscious and unreasoned conjecture in order to perceive in my imagination the image of a card that was *in the air*, so to speak. I was almost certain that now it was the turn of, say, the king of diamonds, and I would ask my neighbor to think of a card. He would think of the king of diamonds.

It was no suggestion from my neighbor, for before he chose his card I had made up my mind to say "king of diamonds." And often in such cases it happened that another person would remark: "Well, that is curious! I thought of the same card!" Thus, it was *in the air*.

Sometimes I have been able to discover the probable mechanism of this enchainment. Thus, 28 was chosen next after 47 probably because $4 \times 7 = 28$. Again, if among the numbers between 1 and 9 one chose 8, that is, a number near to 9, another person would choose 2 or 3, to be farthest away from the former; 2 and 3 would lead to the thought of 6; then, in order not to take again the numbers already used, the choice would fall upon 4 or 5, associated to 3 and 6, which were pronounced more aloud than the others, and so on. It is impossible to foresee all these relations between numbers: if they chanced to agree in several persons at once they constituted the *psychic atmosphere*, playing the part of a prompter.

Evidently the mechanism of these guesses seldom suffices to explain certain unexpected coincidences; but being a determinist in psychology as in other matters, I have said to myself: I am ignorant of this mechanism; therefore I cannot justify the general hypothesis by proofs; yet, all things being determined by an enchainment of causes and effects,¹ it is conceivable that an omniscient intelligence, knowing all the impresses of sensations in our brains, all the connections of our thoughts, all our habitudes, weaknesses, and other qualities,

¹ This clause furnishes a definition of the term "determinist": "One who holds that all things are determined by an enchainment of causes and effects. "Determinism" contradicts "free will."—*Translator*.

might easily calculate or foresee not only our choice, but also the answers of the subject. And as it is certain that the unconscious of somnambules is a Grand Master in occultism, who is there that may boast himself to know the limits of its power? The fact that my subject was not in somnambulism was no obstacle, for I have long been convinced that *all* the phenomena of somnambulism may present themselves isolatedly and momentarily in the waking state.

I beg the reader not to be surprised at these rather conjectural speculations. In dealing with a phenomenon so controverted, so extraordinary, when after long years of research one sees that all his convictions, acquired theoretically and experimentally, are shaken, one defends himself as best he can.

But to return to the facts. Here are three experiments in favor of the psychic-atmosphere hypothesis, hastily made upon another person, not hypnotizable :

<i>A Color :</i>	
OBJECT THOUGHT OF	OBJECT GUESSED
32. Red.	Pink.
<i>A Flower :</i>	
33. Lilac.	Lilac.
<i>A Person Present :</i>	
34. Mr. J.	Mrs. D.

The general outcome of these three experiments seems quite favorable to the theory of transmission. But let us consider the circumstances. The subject is told that there is question of some color, and he guesses it only approximatively; the color was *red*; it becomes *pink*.

The subject is told that the test is some flower. A bunch of lilacs was on the table; every one noticed it, and it was uppermost in the minds of all. Then, the question being about a matter a little more remote, with the probability still strong, only some dozen persons being present, there was a check. Not only does the subject not guess the person, but he names a woman instead of a man. Consequently, these three experiments are almost valueless—and, when I say *almost*, that is solely because of a certain resemblance between red and pink; but the thought of pink may have been called up by a purely fortuitous cause, that is to say, one having nothing to do with suggestion.

Let us now come back to our first subject. Here is a second series of experiments, made with greater precaution, care being taken to avoid the enchainment of associations (May 2, 1885).

<i>Any Object :</i>	
OBJECT THOUGHT OF	OBJECT GUESSED
35. A bust of Mr. N.	Portrait . . . of a man . . . a bust.

Any Object :

OBJECT THOUGHT OF	OBJECT GUESSED
36. A fan.	Something round. Result — o.
37. A key.	Something made of lead . . . bronze . . . it is of iron.
38. A hand wearing a ring.	Something shining, a diamond a finger-ring.

A Taste :

39. Acid.	Sweet. Result — o.
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A Shape :

40. A Square.	Something irregular. Result — o.
41. A circle.	A triangle . . . a circle.

A Letter :

42. M.	M.
43. D.	D.
44. J.	J.
45. B.	A, X, R, B.
46. O.	W, A ; no, it is O.
47. Jan.	J . . . (continue !) Jan.

Third series, May 6, 1885. Twenty-five experiments were made, notes of which, unfortunately, I have not kept, except as to the following, which surprised me most. (The subject has her back turned toward us, holds a pencil, and writes the thought that comes to her. We touch her back lightly while looking on letters written by ourselves).

OBJECT THOUGHT OF	OBJECT GUESSED
48. Brabant.	Bra. . . (I strive mentally to aid the subject, saying nothing.) Brabant.
49. Paris.	P. . . aris.
50. Téléphone.	T. . . éléphone.

Fourth Series, May 8. Same Conditions.

51. Z.	L, P, K, J. Result — o.
52. B.	B.
53. T.	S, T, F.
54. N.	M, N.
55. P.	R, Z, A. Result — o.
56. Y.	V, Y.
57. E.	E.
58. Gustave.	F, J, Gabriel. Result — o.
59. Duch.	E, O. Result — o.
60. Ba.	B, A.
61. No.	F, K, O. Result — o.

A Number :

62. 44.	6, 8, 12. Result — o.
63. 2.	7, 5, 9. " — o.

(I endeavor to have represented in the subject's mind the written numbers, not their sound.)

64. 3.	8, 3.
65. 7.	7.
66. 8.	8; no, o, 6 9.

Thirteen experiments followed with fantastically drawn figures, only five of which presented a general likeness, without much exactitude.

A Person Represented Mentally :

67. The subject.	Mr. O. No, it is myself.
68. Mr. D.	Mr. D.

Any Image (or View) Whatever :

69. We imagine a crescent moon, Mrs. P. representing it to herself with a background of clouds ; I, with one of deep blue.	I see the clouds flitting . . . A light . . . (with a look of satisfaction) it is, the moon.
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If after these experiments any one had asked whether I believed in thought-transference, I should have answered affirmatively. From the point of view of conscious, scientific reasoning, one must have surrendered to the evidence. Chance could not have produced so many fortuitous hits. For example, if we look only at the experiments with letters, *leaving out of account the whole words guessed*, of 20 experiments 15 succeeded, whereas probability allows only *one* success in 24, or 0 in 20—zero against fifteen ! To hit the chance guess of the three-letter combination *jan*, would have required 25³ (= 15,625) experiments without suggestion, while with suggestion *one* sufficed.

Thus, from the objective standpoint, my skepticism might well surrender before the eloquence of the facts. But—and here is the oddity of the thing—in problems of this kind the observer's *subjective impression* is sometimes worth more than a purely empiric showing. Evidently the observer must have a general scientific routine and a special acquaintance with the phenomena belonging to it ; but then it is upon his instinctive *subjective impression* that I should most rely. He may give me all the details—and it is impossible for him to give *all* the details of conditions and circumstances—but if I do not see that inwardly, subjectively, he is not merely astonished, but convinced, conquered by the facts observed, without having his reason upset, as may unfortunately happen—it was so with Zöllner¹—I would give no particular credence to his revelations. I should prefer an almost entirely defective experiment, but accompanied by that personal

¹ Slade, the American spiritist, succeeded in making the German mathematician Zöllner believe in a fourth dimension of space, by showing to him a knot produced on a single cord after the two ends of it had been tied together and sealed with wax bearing the impression of Zöllner's seal !—*Translator*.

impression of an instructed and honest man which is expressed in the cautious yet decisive phrase: "There's something in that."

Now, this personal impression was mine when I made those hurried experiments; but the thing that was always lacking was that other impression, subjective also, but more decisive: "Here is direct transference of thought."

Singularly enough, nearly every time that the subject was going to guess our thoughts, I had a presentiment that it would be so. It seemed to me that, despite all precautions, and though we were all in perfectly good faith, there was a certain trickery on the part of our unconscious, and that they were fooling us. It seemed to me that even in choosing the objects hardest to guess, I was astutely making the choice that most facilitated success; that even when a card was drawn at random, I substituted another for it under some insufficient pretext, even forgetting this manœuvre, and remaining quite at rest in my conscience, while my partner (*aide*) nothing suspected.

I fear I shall be misunderstood. I am speaking of a phenomenon almost inappreciable, of operations infinitesimal, transient, more or less unconscious, caused by the psychic atmosphere. I have been long used to make psychological observations; they have been the principal occupation of my life, from early childhood I might say, for since my fifteenth year I have been taking daily notes (some of them published in my native language), and I was but seventeen when I wrote my first dissertation on "Methods of Psychological Study," published in 1869, wherein I showed (for the first time, I believe) how the phenomena of hypnotism may be exploited under the form of a special method by *positive* theoretic psychology.

Consequently I do not wish to be suspected of any sort of mysticism, and I think I have the right to claim for myself the routine that is necessary for making exact observations. But just because of this long practice I have reached some empiric subtleties very difficult to express. Psychology has throughout for me an aspect widely different from what one sees in the best works on our science. The psychology of the day seems to me gross and crude in view of the subtleties of real life as I see it. The theory of association of ideas, for example, which has been made, and with reason, for the nonce, the sole ground of the whole psychology of phenomena, is for me only a partial and quite inadequate expression of the mechanism of psychic life. It is but a rough draft of a delicate mechanism. It may suffice for the needs of instruction in the elements of psychology, but not for a finished science. I am free to confess that with the association theory of to-day I do not even see why our ideas associate, and in general why they live, circulate and produce sensible effects. And yet I am a determinist, and it is no faculty, no obscure force, that I would add to the association theory to make it true to fact and life.

The question is one of details, but of details that stand related to the current theory of association as vision through a microscope is related to direct vision.

For explaining the larger phenomena of psychic life this association-anatomy is well enough; the thing we need is a microscopic histology of association when we have to do with rare phenomena, *i. e.*, with phenomena *rarely noticeable and rarely noticed*—for that, too, is a point of my personal separatism in psychology, to wit, that rare phenomena are such *only because we are rarely capable of seeing them*. On the other hand, we should be less ready to discern an enchainment through contiguity, likeness, or contrast, in time or in space, were we to see things through a psychological microscope which should oftentimes distinguish like phenomena, assimilate contrasts and dislocate contiguities, interposing a number of intermediate links and agencies.

Unfortunately, when it comes to setting forth details precisely, two things are lacking: first, clear vision of these details, and then, even when they are seen passably well, the possibility of expressing them correctly. Here we may call to mind the vicious circle of the sophist Gorgias. Plainly our skepticism is not, like his, nihilistic. We do not see clearly to-day, we shall to-morrow, and no doubt we shall little by little find new words for new ideas. In the meantime it is better to stand still where we are than to create an incomprehensible language and to talk Volapük under pretense of propagating a universal science. We have had plenty of Volapükian psychologies which, albeit they were created by Kants and Hegels, no longer exist in the estimation of exact science. All this notwithstanding, the Kants and Hegels may have had profound ideas that will be understood, *better than by their authors*, a few centuries hence.

I have often mentioned the unconscious. I have even personified it a little, without any back-thought,¹ however. I concede to German psychology the great merit of having brought to light that absolutely true and fundamentally necessary theory. But see what happened when men set about defining it prematurely; see what it has come to be in the deft and reckless hands of Von Hartmann; a fantastic romance of the unconscious, an Edgar A. Poe story, not even as near the facts as a story of Jules Verne's!

Hence it is that I choose to content myself with a few hints that to me seem clear, instead of plunging into subtleties that I do not myself quite understand. Later, when we come to certain details of the question, we shall see what it may be possible to add.

So, then, I was convinced of the reality of the *facts* of mental suggestion, but not of suggestion itself. It remained to formulate the theory of the facts, and that theory appeared to me far removed from

¹ *Sit venia verbo*. It is meant to translate *arrière pensée*—the thought (or intent) that is behind, or *lies back of*, an overt act or speech.—*Translator*.

the theory of *direct action of mind upon mind*, such as Mr. Richet received.

Finally, here perhaps were two or even more different processes to be discovered.

First, a *concordance* between two unconscious mechanisms, as between Leibnitz's two watches, a concordance resting on a sort of harmony preëstablished through the mutual interchange of the ordinary conscious sensations, and in which the object chosen as well as the object guessed is determined independently the one of the other, but by one self-same unconscious determinant set of works.¹

Then, in some cases, a true *perception* of thought by *intermediation of external signs* that may easily escape us, seeing that so perceptible a sign as the tension of the muscles in the direction of the object thought of has taken so long to be discovered. There would thus be an exaltation of perception, but of the normal perception for physiognomic, pathognomic, and ideognomic signs, that usually enable us only to distinguish joy from sadness, quiet enjoyment from intense pleasure; sympathy, distrust, irony, or sincerity, in the touch of a hand or in the tone of a voice; whereas here, in virtue of an exceptional perceptibility, those signs would enable us furthermore to divine whether one is thinking of *yellow* or of *blue*, of a *round* figure or a *square*.

Finally, over and above all normal perceptibility there is perhaps ground to suppose a transmission, *always indirect*,² of vibrations produced by the thought itself, and capable of reconstructing the thought, like as the human voice produces undulatory telephone currents that can reproduce speech at another like station.

Henceforth all this was possible, and it behooved to look forward to an unheard-of complexity of phenomena. Consequently it was my wish to simplify at least the conditions of experiment. In the experiments already recited this was impossible. The subject had always to be notified in advance that the experiment was to be made, consequently his unconscious was put on its guard. The subject could take for granted that we would avoid repeating the same experiments, and that if at the seance before we thought of *blue* and *yellow*, it would now be the turn of *red* and *green*.

We had to circumscribe, and that pretty narrowly, the category of objects to be chosen, and then the thought of the subject was also circumscribed in advance, and had to rummage in only one of the receptacles of memory, there to concentrate all the perspicacity of his divining power.

¹ *Rouage*—The works of a watch, the "movement."

² The meaning of *indirect* here is gathered from the author's illustration. The human voice is one thing; the undulatory current another. The result in a receiving telephone is the human voice *indirectly* transmitted: it has suffered transformation and retransformation in the passage. The case may be the same when thought is supposed to be transmitted from one brain to another.—*Translator*.

Of objects belonging to the same category, only a very small number will be in sight and capable of being chosen for the experiment. Suppose the thing to be thought of is a flower, assuredly one will not choose *Scrophularia nodosa*, nor *Contraceptiva officinalis*, which one would find it difficult to bring clearly before his imagination: one will choose a rose, a lilac, a violet, and then from time to time he will meet with success. The subject will *divine* (that is the word) our thought. But that is not what I want. I want a fact of actual thought-transference wherein shall be nothing to be divined, and wherein the unconscious may calculate as it will without prejudicing the precision of the experiment.

What I want is that a subject in nowise forewarned, nor expecting anything, neither seeing nor hearing anything, shall manifest the action of my thought by some reflex action *visibly connected with that psychic impulse*. I shall be content with any sign however slight, but it must be a sure sign and a *constant*, and it must be one that cannot be referred to any other cause but my mental action. That is what I want; and till I have in my hands a fact of that sort I shall not have *subjective impression* of the reality of a mental action; but till then it will not be worth while to make a special, thorough study of the matter and to brave the prejudices of the scientific.

The fitting occasion for that decisive experiment was not long in coming.

CHAPTER III.

TRUE MENTAL SUGGESTION.

I WAS attending a lady suffering from hysterical epilepsy, whose ailment, already of long standing, was aggravated by an attack of suicidal mania. Mrs. M., 27 years old, strong, and of good constitution, has the look of perfect health (hypnotic exp.: insensibility and almost instantaneous contracture of the entire arm). Convulsive seizures of the major hysteria dating from childhood, almost. Hereditary influences very strong. For some time past, besides these principal symptoms, at sundry periods, attacks of mental alienation, with congestion of the anterior lobes and anæmia of the posterior lobes of the brain; paralytic, nervous, fainting fits, and epileptic seizures of brief duration. Transient contractures and amblyopia, more marked on the left side. A single *hysterogenic* point beneath the left clavicle. A *delirigenic* point on the right occiput corresponding to the superior occipital fossa. No anæsthesia. Pressure on the ovaries arrests the attack for a moment. Sensitive to tin, but also to other metals in different and varying degrees. Temperament active and sprightly,

combined with extreme *inner* moral sensibility, that is to say, without external signs. Character eminently truthful, kindliness very marked, disposition to self-sacrifice. Intelligence remarkable, many talents, capacity of observation. Momentary lack of will-power, painful indecision, but afterward exceptional firmness. The least moral fatigue, an unexpected impression of small importance, whether pleasant or painful, is reflected on the vasomotors, though slowly and imperceptibly, and brings on an attack or a nervous fainting fit.

One day, or rather one night, her attack having passed away (including the delirium phase) the patient was sleeping quietly. Awaking suddenly and seeing us (a woman friend and me) beside her bed, she begged us to go and not to tire ourselves for her sake to no purpose. She was so pressing that in order to save her a nervous crisis we left her. I went downstairs slowly (she lived on the third floor), but halted several times and listened, being haunted by a presentiment of mischief (she had given herself several wounds a few days before). Reaching the courtyard I halted once again, considering whether I should leave or not. Suddenly the window was opened noisily, and I saw the patient lean out with a rapid movement. I sprang to the spot whereon she would fall, and mechanically, without attaching any importance to what I did, I concentrated my will to withstand her fall. It was a silly thought, and I was but imitating the action of billiard players, who, foreseeing a *carambolage*, strive to stop a ball by gestures and speech.

Yet the patient, already leaning out over the window sill, stopped and drew back slowly and by degrees.

The performance was repeated five times in succession, and at last the patient, as if fatigued, stood motionless, her back resting against the frame of the window,¹ which remained open.

She could not see me, for I was in shadow and night was falling. At that moment Miss X., the patient's friend, ran in and seized her by the arms. I heard them struggling and hastened upstairs to help. I found the patient in a fit of insanity. She did not recognize us, taking us for robbers. I succeeded in releasing her grip on the window frame only by pressure on the ovaries, which made her fall upon her knees. Again and again she tried to bite me and only with much difficulty was I able to put her again in bed. Keeping up with one hand the pressure on the ovaries, I brought about the contracture of the arms, and at last endormed her.

Once in the somnambulic state, her first words were, "I thank you and beg pardon." Then she told me that she had wished to throw herself out of the window, but that whenever she attempted it, she felt herself "lifted from beneath."

¹ The "French" style of window, hinged on the side.—*Translator*.

"How so?" I asked.

"I do not know."

"Did you suspect I was there?"

"No; it was just because I thought you had gone away that I wanted to carry out my plan. Yet it seemed to me now and again as if you were beside me or at my back, and that you did not want me to fall."

This experiment—or rather accident—was, of course, not enough to prove action at a distance. But it suggested to me the thought of studying the question anew. As there was an appearance of action, it was a very easy matter to test it experimentally. But in order to have the conditions just what they ought to be, I breathed not a word to any one about what I purposed to do, and I even resolved to wait a few days, so as to arrange the details of the experiment.

I had been in the habit of endorming the patient every other day, and I used to leave her in profound slumber (aideic state) while I made my notes. Two months' experience gave me the assurance that she would not stir till I should approach her in order to induce somnambulism proper. But this day, after taking a few notes and without changing my attitude (I was several yards distant from the patient, outside of her field of vision, with my note-book on my knee and my head supported by my left hand), I pretended to be writing, making the pen scratch as it had been doing, but inwardly I concentrated my thought upon an order I gave her as follows :¹

December 2.

1. Lift the right hand !	1st minute : no action.
I watch the patient, looking through the fingers of my left hand on which my forehead rested.	2d minute : agitation in the right hand.
	3d minute : agitation increases, patient frowns and raises the right hand.

This experiment, I confess, moved me more than any other.

2. Get up and come hither ! (I lead her back to her place without uttering a word.)	Patient frowns, stirs, rises slowly and with difficulty, comes to me with hand outstretched.
3. Take off bracelet from left arm and hand it to me !	No action.
I touch her on the right arm, and perhaps give it a slight push in the direction of her left arm, while I concentrate my thought upon the order given.	She puts forth her left hand, rises, and goes in the direction of Miss —, then toward the piano. She sits down exhausted. She takes off her bracelet. (Seems to be reflecting.) Gives it to me.

¹ Most of these experiments were communicated to the Society of Physiological Psychology, January 25, 1886. Some of them have been published in the *Revue Philosophique*, August, 1886.

4. Get up, draw the armchair up to the table, sit beside us !

I check her hand thus astray.

5. Hold out the right hand !

Stay seated !

Give the left hand !

Give the left hand !
Not that ; the other !¹

She frowns, gets up, and comes toward me.

" I have yet something to do."

Seeking something ; touches the stool and displaces a glass of tea.

She steps back, *seizes the armchair, pushes it toward the table* with a smile of satisfaction, and sits down, dropping into the chair through fatigue.

" They tell me to carry, and do not tell me what. Why do they *speak* so indistinctly ?"

She stirs.

Holds the right hand out.

Tries to rise.

She settles herself again in the chair.

Movement of left hand, but she does not hold it out. Rises and goes to the sofa.

Gives the right.

Gives the left hand.

It is to be remarked that even in the waking state the patient often mistakes one side for the other.

During experiment 5 *active somnambulism* manifests itself ; the patient converses with us in a playful vein. She no longer obeys the orders. " I am now going to sleep," she said.

She slept. During the sleep there were some traces of an hysteric attack. At length she seemed to awake. " There is a tingling in my head," said she, " that will not let me sleep. I don't want to sleep any longer. Sit by me." " Are you still in somnambulism ?" I asked. " Yes." (This patient was able to note each phase of her state with wonderful precision—a very rare circumstance, indeed. I often pretended not to recognize the state she was in, so that she herself might describe it.)

" And if you go to sleep in that state, is it all the same as if you were in the waking state ?" " Oh, no ; for now the legs and the body go to sleep first, and then the head. The head, too, awakes first, so that I can easily tell whether I have slept well or not ; whereas when I go to sleep from the waking state, I go to sleep in the head and I know nothing more. Then, too, when I converse, being magnetized, *I am resting all the same* ; whereas if I were to converse in the waking state my head would be tired and drowsy."

¹ All these orders were given mentally and without gesture. No word was spoken.

December 3.

Mrs. M. is endormed by the process of gazing,¹ and falls into a very profound slumber (*paralytic aideia*).

6. Answer whether you hear me? | No action.

I put the same question *viva voce*. She does not hear. A moment later she stirs slightly.

"You did not hear me just now?" I asked. "No!" "Why?" "Because my sleep was too deep." "Will there be an attack this evening?" "No!"

I therefore left her to herself, and a few minutes afterward began the experiments again.

7. Give me your right hand !	Frowning.
Give me your hand !	No result.
No matter which hand.	Gives the left.

If at this moment I speak to her, touching her at the same time, she replies ; if I speak to her without touching her, she hears only unintelligible sounds.

I tell her that I am obliged to be absent fifteen minutes ; once outside, I try to call her mentally :

8. Come hither !	Frowning.
	General agitation of the body.

Here the experiment is interrupted by a singular accident. The action from a distance produces in her a general hyperæsthesia, and in that state she "feels incommoded by something on her right ;" "an unbearable stench horrifies her ;" "an imaginary noise, produced by the irritation and congestion of the brain, prevents her hearing" me.

"It seemed to me," she said, "that I must get up and walk about ; but that horrible atmosphere was suffocating me. *That thing (celà)* prevented me ; *that thing* does not love you, but *that thing* is ashamed to confess it."

"What is it, pray?" "I do not know ; but deliver me from *that thing*"—and she made gestures of repulsion toward the right. We saw nothing out of the common in that direction. At last I noticed that there was on the flower stand a new plant, and I removed it. "Ah, at last!" said the patient ; "thank you ; I was near having a paroxysm."

The new plant had been brought that day by one of her friends, a lady for whom, in the normal state, she had a strong liking, but whom in the somnambulic state she could not endure even at the distance of several yards. This I *knew* already, having witnessed a terrible

paroxysm caused solely by the presence of this lady; but it never occurred to me to suppose that an *object* that had belonged to her would have the same influence. First I thought the patient's abhorrence of the plant might be due to its odor, but it was nearly odorless. Then I made several experiments with objects coming from the lady, mixed with other objects. For instance, I placed upon the couch beside the patient, yet at some distance, a roll of music brought by this same lady. Having just touched it lightly with her hand in making a gesture, she drew herself away from it quickly, asking who it was that was treating her so ill. So with other objects. She never made out what was the matter, but she always was conscious of an antipathic influence. Even a playing-card coming from the lady, and shuffled with several others, was rejected as "disagreeable." I must add that the young lady in question was a great friend of Mrs. M., and was jealous of the influence I exercised over my subject.

December 5.

(Our patient, on awaking, passes momentarily through a transient state of monoideism, and then she has always a sense of the mental state of the persons around her. She will say: "Why have you greater confidence to-day?" "Why is she so worried (or so happy) to-day?" And so on. But once fully awake, she no longer has this sense.)

9. An experiment in the state of
genial, active somnambu-
*lism.*¹

No action.

(Patient is half awake.)

"Where is she—Mary? She must have a wearisome task to perform. I believe she is thinking of nothing, *for I have no feeling of her.*"

Wishing to sit back of the table I came near falling, the chair being lower than I thought. The patient uttered a cry. "What is the matter?" I asked. "It seemed to me," she answered, "as though something were giving way *beneath me.*"

If any one pinches me she complains of it, yet she does not know it is I that suffer. I tell her that I want to put her a few questions. "Then endorm me a little more," she said; so I make a few passes in front of her eyes. At this moment she is in *passive somnambulism*, *i. e.*, she answers easily and volubly every question put by me (and by me alone), but does not of her own accord say anything.

"Can you tell me," I ask, "in what degree of sleep you undergo the action of my thoughts?"

"When the members sleep in very deep slumber," (each part of

¹ *Somnambulisme actif gai*. In the original this exp. is numbered 8, and the words of the subject are *given in the text*, not in two columns, like the others. The author forgot to state the order given to the subject.—*Translator*.

her body can be put to sleep and awakened separately). "and when I cannot think by myself."

"But if, then, I order you to rise, you will not be able to do so?"

"Alone, no; but if you will it strongly something will lift me."

"Do you know beforehand what I require of you?"

"No, but it gives me an impulsion; and I prefer you to divide your thought. I cannot take it in all at once. I do not understand the words, and I believe that you might think in any language whatever; I feel only an impulsion that comes upon me and at last controls me." (Here I gave some explanations to Marie.) I now asked: "Did you hear what I said?"

"I heard you speaking, but understood nothing, for you had not the intention to be understood by me."

"If I do not address my speech to you, what do you do mentally? Do you think of anything?"

"When I am in light sleep as now, I can think well *if you are near me*; but if you withdraw there is a veering in my head¹ as though you were to leave me in a dark room."

"And if I were to put you in a deeper sleep?"

"In that case I should know nothing, and were you to leave me, I should remain just so, not suffering anything."

"In what state, then, in your opinion, is thought-action easiest?"

"*For that the sleep must be very deep, but I must hear you all the same.* In fact, I hear you always, or at least I think I do (plainly the somnambule could not know whether she heard me in the state of absolute aideism); still, sometimes I hear only detached words; for example, you put me the question, 'Do you hear me at this moment?' and I hear only 'hear' and 'moment'; or again, I hear all the words, but each word isolated, so that when you are at the end of a phrase *I have forgotten the beginning*; the first words are gone from me (mon-oidism). Sometimes, too, I hear you and understand you well, but I have not the strength to answer."

"And in the state you are in at this moment could you receive my thought?" "No," she said. I gave her, mentally, the order "Awake!" No result. But some minutes later she said of her own accord: "Awaken me;" and then I was able to awaken her from a distance. (A simple yea never sufficed to awaken her.)

December 7.

The patient is in the *aideic* state and partly tetanized—arms in contracture, the legs a little stiff.

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| 10. Rise, go to the piano, take a box of matches, bring it to me, light a match, go back to your place! | She rises with difficulty.

 Comes near me. |
|---|--|

¹ *Il se fait un revirement dans ma tête.*

Go to the piano!	Goes to the piano, but passes beyond.
Come back!	Turns back.
Still farther!	Goes toward the door.
I stop her with my hand.	Returns to the piano.
	Seeks too high.
Lower!	No result.
Lower!	Lowers her hand.
Take the match-box!	Touches the box, then retreats.
Take the match-box!	Touches it again, and takes it.
Come to me!	Comes to me.
Light!	Wants to pass the match-box to me.
Light!	Takes out a match.
Light!	Lights it.
Go back to your place!	Returns to her place.
11. Bring the right hand to my lips.	Her right hand stirs.
Raise it!	No result.
Raise it!	Raises the hand.
Give it to be kissed!	Brings the right hand to her face; removes her cravat.
Not that! To my mouth!	Brings her right hand near my head.
To the lips!	Brings it to my lips.

December 9.

The patient is sleeping well; *aideic* state, with tendency to contractures.

12. Lie on the right side.	No result. She rises and stops; her whole body contracted, perhaps under the influence of my gaze, which was fixed intently upon her.
I suppressed the contracture by means of a light massage. I take her hand, and, at a given moment, try mentally to	
13. Produce contracture in the left arm.	The left arm almost instantly becomes stiff.
14. Lie down!	No action.

At this moment there is a state of hyperacusia: the slightest noise irritates her; then she falls again into a state of general immobility.

Then suddenly: "I do not hear your thoughts well, because either I sleep too soundly or not deeply enough."

Opening her left eye produces catalepsy in the right arm, then in both arms. Opening the right eye produces no result at all.

15. Ordered to scratch her cheeks. | No action.

At this moment a flaming match held before one of her eyes, opened for the purpose, produces no reflex action. Even the contraction of

the pupil is not as great as usual, though but a moment before the contraction was nearly normal, and the patient said she saw "a little brightness." Now she says she sees nothing. I awaken her; she seems to be pretty well, but little by little a paroxysm comes on. I stop it by magnetizing her anew.

December 11.

(Experiments made in presence of Mr. Sosnowski, engineer.)

The patient doing well. I put her to sleep in two minutes, and show the three principal states, viz.:

1. Aideia (without thought, very deep sleep).
2. Monoïdeia (one thought alone possible).
3. Polyideia (somnambulism properly so-called).

Then by means of a few passes in front of her eyes, I deepen the sleep to the transition degree betwixt aideia and monoideism. She now hears me even without touch, but she is totally paralyzed and insensible.

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| 16. Come to me!
I change position and hide as far
away as possible. | She rises and comes straight to me. |
| 17. Shake hands with Mr. S.!
(The experiment was proposed by
Mr. S.) | She extends the right hand and
gives it to Mr. S. |

At this moment the opening of her eyes did not produce catalepsy. The touch of Mr. S., as of every stranger, is highly disagreeable to her. She will not allow them even to come within two feet of her.

December 18.

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| 18. An experiment in the state of
active somnambulism, be-
fore the paroxysm. | No action.
A few minutes later the paroxysm
comes. Then I put her into
deep sleep for the whole night. |
|---|---|

She awoke quite well the next day.

December 27.

In endorming the patient *I prolong the passes beyond the usual time*, for without the passes she fell asleep with difficulty. The sleep becomes very deep. She no longer hears me at all. The pulse is weak and uneven, pulsations 80. The respiration is short and intermittent. I quiet her by laying my hand upon the pit of the stomach.

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| 19. The subject is to go to the
table, take a cake and give
it to me. (Seeing that the
sleep is too deep, I "awak-
en" her arms and ears.
She hears ¹ me without my
touching her.) | No result.

She rises.
Comes to me. |
|---|--|

¹ "Hears" his thoughts.—Translator.

I stop her.

Extend the arm !

" " "

Lower !

"

Take it and give it to me !

Stands hesitating in the middle of the room.

Approaches the table.

No action.

She extends the arm.

She gropes on one side.

She touches the cake and starts.

She takes it and gives it to me.

She is evidently fatigued ; her eyelids droop. "Why," I asked her, "did you take the cake and give it to me ?"

"Because all the other objects were *strange*, while the cake seemed to me *well known*. But I did not know it was a cake. I knew only that it was something less repellant than the *strange* objects. I was not sufficiently asleep (active somnambulism.) *My ears should not be awakened.*"

A few minutes later an experience was had, all the more curious because unexpected. I was absorbed in thinking of a matter of personal concern that troubled me the whole day, and despite its intimate nature I must make it known here in order that the reader may understand the occurrence.

The case of Mrs. M. taking up all my time, I neglected several affairs, so that I found myself greatly straitened for money. My attendance on the patient was wholly gratuitous and I did not wish that she should have any suspicion of my embarrassment. As I could not leave her because of the seriousness of her condition (she was constantly subject to fits of suicidal mania) my thoughts were ever returning to the question of finance.

I chatted with the patient pleasantly, but perhaps my voice betrayed my unrest, and I saw that she divined what was in my mind. She halted in the conversation and became pensive. From long-continued observation I too was able to guess the thoughts that occupied *her* mind. After reflection she said to herself : "He is in trouble ; he must be helped ; but if I am awakened I shall forget all. What shall I do ?"

She reflected on the problem and hit upon a plan. She took off a finger ring, as was her custom whenever she desired to remember anything, and her face showed a strong resolution not to forget the meaning of that act.

"You must not think about that," I said.

"If I want to think of it, you will not hinder me"—and she made pretense of not caring about the matter, in order that I might not prevent.

Some minutes later I mentally gave her the order to forget the project. That instant she suddenly withdrew her hand.

"Do not touch me," she said, "for I feel my thought is leaving me."

"It will leave you anyhow," I said, and made a few passes to make her sleep deeper.

"Do not put that out of my head! Oh! you have no pity. What was I thinking of just now? I wished to remember something. I have quite lost it." A few minutes later I noticed on her countenance tokens of renewed mental action. The sleep was become less deep; the thought had come back to her, and again she strove to evade my influence, requesting me to wake her as slowly as possible "for fear of a paroxysm." I awakened her very gently, suggesting cheerful thoughts on her coming out of sleep. Once awake she became pensive and put her hand to her forehead.

"It seems to me," she said, "that there is something I have to remember, but I don't know what." She examined the ring again and again. "No, I do not remember anything."

She was cheerful and talked freely with us.

Here are two more experiments *in the waking state*.

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| 20. What is it I want this moment? | It is true, you want something. She looks round about as if seeking something. Then peering into my eyes, says: "You want a little wine for tea." Correct. |
| 21. And now? (My wish was that she might take a cake.) | No; I know nothing any more; I feel nothing. |

December 28.

Endormed in the morning, she recalls her memory of yesterday, and tries once again to fix it in her mind. She finds a new means of doing this. Suddenly she uttered an exclamation—a phrase that could not be understood by us, but which, when recalled at waking, would call up in her mind the plan contrived the evening before. Then, to guard against an influence, she stops her ears and begins to mutter so as not to hear me.

22. I give her mentally the order to forget. She thinks she has won and asks to be awakened slowly. I awaken her. The mnemonic phrase is repeated to her. "What does it mean?" I asked. "I do not understand it all," she replied; and she thought no more about it. In the evening she had a slight attack of delirium. She had an hallucination that she was a dead person. The attack ended in a general contracture: this I suppressed. She then fell back upon the cushions and remained motionless.

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| 23. Get up and come to me! | She stirs a little. Result=0. |
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At this moment she was in very profound sleep (paralytic aideia). She does not hear me unless I touch her.

24. I want you to hear me !

She hears the " noise " of my voice, but does not understand.

25. Ditto. I excite the ears a little by movements of the fingers, which usually produce hyperacusia.

Same imperfect result. I cannot make myself understood. At last, after several minutes, she hears me clearly.

26. I now purposed to make her hear the voice of Miss * * *, which she does not hear of her own accord. (Puységur's experiment.)

Result = 0.

I touch the hand of Miss * * * while she is speaking.

She hears the voice like a whisper, or rather as pretty loud sounds, but not understandable. She hears the voice without my touching Miss * * *. Again I touch Miss * * *, but the patient does not hear the words spoken.

These experiments were probably spoiled by the patient's inconstant and pathological state. After some minutes :

27. Give the other hand ! (I was holding the left).

The right hand stirs. (It was in contracture)

She raises it a little.

She stretches her right hand toward me with much difficulty, " for it is stiff." She gives it to me, then falls back on the pillow very much fatigued.

28. Ask what I want ! (This without touching.)

Result = 0.

What is it ? What do you wish to say ? (Aloud.)

Something urged me to put a question—I don't know what—I have forgotten. Things are all mixed in my head.

29. Open your eyes and awake !

Result = 0.

She moves her head to right and left, then the right arm, but does not awake.

At this moment she was absorbed by a *somnambulic reverie*, which reduced the sensibility. I tried to awaken her by spoken order, but the result was only a fatiguing drowsiness, and after several minutes I was obliged to have recourse to passes.

December 31.

The patient is feeling well. I produce easily whatever states I wish, and halt at a phase intermediate between lethargy and monoidism. She hears me, but me only, and she cannot answer save by signs or by detached words.

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| 30. Get up, go to your brother,
and kiss him !

Why do you start ? | She gets up.
Moves toward me, then goes back
toward her brother.
Stops before him, hesitating, goes
slowly up to him and kisses
him on the forehead with a
start.
Because it is something <i>strange</i> .
(She loves her brother dearly.) |
|---|--|

There was a serious paroxysm that evening ; she gave herself several cuts on the temple with a knife. I came in time to prevent suicide, and endormed her with much difficulty. She did not recognize me. She begged my pardon in somnambulism, at the same time complaining that the knife was not sharp enough.

The normal state did not return till after two hours of sleep. The hyster epileptic seizures do not recur any more, but the paroxysms of mental alienation and the fainting-fits are still frequent.

January 6.

The patient was lying on the couch and heard nothing. I went out noiselessly to make an experiment at a distance.

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| 31. Get up and be seated, till I
come back ! | She frowns, her respiration grows
rapid, but she does not move. |
|---|--|

The experiment had lasted hardly a minute when it was interrupted. She was not very well, so I gave up the experiment in order to attend to the patient.

January 10.

I endormed the patient by passes at a distance, that is, without touching her. Then I try to

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| 32. Produce deep natural sleep in
artificial somnambulism. | Some seconds after the beginning
of the mental action, I hear
snoring, the lips open and so
remain. |
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A few minutes after, this state ceases. I begin anew.

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| 33. (As above.)

Open your mouth !

Close your mouth ! | Same signs, <i>minus</i> the opening of
the mouth.
She opens her mouth and sleeps ;
respiration rapid.
No action, probably because her
sleep was so deep |
|--|---|

She slept well the whole night.

January 11.

State of aideic lethargy, with tendency to contractures.

35. Extend the right arm.

Right arm stirs.	
Same phenomenon seven times consecutively.	
Slight movement of left arm.	
She rises partly.	
Falls back.	
Extends the right arm.	

At this moment she hears me, but finds difficulty in answering me.

She recognizes an object belonging to me among four like objects, pointing it out as "best known." (She sees it now for the first time, but so she always speaks of what belongs to me, what I have touched, or concentrated my thought upon.) She rejected one object among five that were alike—the object rejected belonged to Miss X., whose presence is to her insupportable. Three different fingers touch her, she recognizes mine; and so on. She asks for a drink, and some one puts a glass of water to her lips; but she notices nothing and keeps asking for a drink. If I hold the glass she recognizes it at once, and drinks with pleasure. (This phenomenon is of daily occurrence.)

January 14.

Mrs. M. falls asleep with difficulty, but her sleep is exceedingly deep. Even after half-an-hour she does not hear me. There is no contracture. The head is not very hot. The members are not cold. The pulse is pretty regular, 80 pulsations. From time to time some slight tremor of the fingers. The nervomuscular superexcitability does not exist. The members retain the posture given them. Consequently there is a state of cataleptic aideia.

36. I wish you to hear me.

No action. A minute later several fainting spells.	
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Because of the pathological state, no conclusion is to be drawn from this check in the state of cataleptic aideia. Little by little she passes of her own accord into the *somnambulic delirium*. An hour later, acting more powerfully, I brought about a calm somnambulism.

37. Sleep well the whole night! | She does sleep well the whole night.

She awakes quite well, barring an amblyopy that soon passed away.

January 18.

The improvement in Mrs. M.'s health permits me to make a few new experiments. I endorm her as usual. Then I endormed her brother also, and he remained motionless in an armchair in the middle of the room. He was in a state of mild paralytic aideia, easily effaced, but from which he could not come out by himself. Mrs. M.

lay on the couch at the lower end of the room, in passive somnambulism. By means of a few passes I put her into a deeper sleep—a little too deep even—and I withdraw to begin the experiments.

38. I order her mentally to kneel
in the middle of the room.

I take hold of her hand.

Kneel !

Result — o.

She stirs. (Afterward she said that she was sleeping very well, when something awakened her.)

She gets up and walks toward the middle of the room, where she encounters her brother. This time she does not start at all; on the contrary, she feels of him with a certain satisfaction and a little astonishment.

Then she goes back to the couch and sits down.

After two minutes of hesitation she kneels.

She told us afterward that it was her brother that had put her "off the scent." "I knew not what to do," she said; "I sensed you here and there. That confused me. There was 'another you' in the middle of the chamber."

"'Another me?' How is that?"

"Something that was you. I don't know. But that confused me."

January 24.

She was put to sleep in the armchair (*aideia*, then *monoideism*).

39. Ordered to blow out a lighted
wax candle on the piano.
She stands so near to the candle
that I blow it out myself,
lest her gown take fire.
Give me the candle !

40. Give me your left hand !
(I held her right.)

41. Come to me.
(This experiment was performed with many precautions; the somnambule was not aware that I had retired and was acting, at a distance of several yards, from the rear end of the hallway)

She rises.

Comes toward me, then goes toward the piano.

Touches the music as she gropes.

Removes the candlestick.

Takes the candle out of the candlestick and brings it to me.

Raises the left hand and gives it to me.

Frowns.

She rises.

Extends the right arm, advances, opens the door, and goes straight into the hallway, where I hasten to meet her.

She showed pleasure in encountering my hand, then she returned slowly to the drawing-room.

That same evening I made two experiments more, to test my personal magnetic action.

As I have already said, whenever the patient touched a "strange" object or person, *i. e.*, outside of my influence, there was a start and an instinctive repulsion. This I wished to verify. I requested her brother to take, unnoticed by her, a seat not far from her, a little behind where she was. Then, by exerting an attractive action upon her arm, I so guided her that she by chance touched the arm of her brother. There was a shudder of repulsion, and a repetition of the experiment gave the same result. Then I endormed the brother, unknown to the subject, where he sat, and began the attraction again. She was obliged to touch her brother several times, *but no more repulsion was shown.*

Another comparative experiment was made during normal sleep. Three hands, of three different persons, were brought within a few inches of her head. After a minute she became slightly agitated, raised her hand above her head, as feeling for something, pushed away the other two hands, and drew mine to her. Almost immediately the natural sleep was transformed into somnambulism. Not knowing that I was there, she was astonished to see me near her

February 4.

On awaking she showed, as usual, her sensibility with regard to the psychic state of those present. "I am very angry at Marie," she said. "Why so?" "Because all the time she has been trying to keep me, and it is absolutely necessary for me to go." (That was exactly so.)

February 5.

The hysterogenic point beneath the left clavicle no longer exists. But she does not yet feel the warmth of my hand at the back of the head (delirogenic point). In somnambulism, her sensibility is already normal. Magnetization checks the beginning of a paroxysm of delirium. Aideia, 82 pulsations. After thirty minutes of this state the head grows cooler. A few minutes later passive somnambulism appears, and then active somnambulism. Then she asks me to awaken "her whole body except the front of the head." In this state she manifests a very high degree of sensibility. She notices everything, but feels a difficulty in reflecting. *If one pinch me, or strike me, it hurts her.* She describes perfectly my mental state, or rather my sensations. The touch of a stranger is still disagreeable to her. I give myself a pinch. "I do not like that," she said.

In general she is not obedient in this state, in spite of the transmission of sensations; she is too irascible for that. She undergoes the influence of my sensations, but not of my will. The memory persists.

After an hour this state disappears and she falls into her normal sleep.

Here I stop. The history of this patient has been most instructive to me. I have with regard to her case a great volume of notes taken on the spot, and having a bearing upon sundry other questions, among which the question of therapeutic holds the foremost place. Next comes the question of mental suggestion, that of physical action, that of hypnotic phases, and a few others of less importance. I have purposely left out whatever was not directly concerned with psychic transmission, so as not to complicate the task of the reader, who will find here quite enough if he will but study with the necessary attention the details given above.

I have left out nothing—quite the reverse—that had to do with our principal subject. I have given *all* the experiments, even those which of necessity had to be inconclusive and resultless, or which could be successful only in part, because of accidental circumstances. Hence, the general effect of this narrative will be less conclusive for the reader than for myself. As for me, I am free to confess it, these experiments were decisive. At last I have the *personal impression* I sought so long, of a true, direct, indubitable action. I was fully sure that there was neither chance, coincidence, nor suggestion by attitude or gesture, nor any other possible cause of error. Wherever these influences were for a moment added, I have pointed them out, and the reader will himself be able to appreciate them in accordance with the principles already set forth. But a point that may have escaped the reader, just because of the strictly objective manner of this account, is that from the second week forward I was already master of the phenomenon, and that if in the subsequent experiments there still were checks, that was solely because I wished to verify the impossibility or difficulty of success in certain hypnotic phases. Whenever I produced the phase of sleep favorable to these experiments, they were always successful. The reader will not wonder that I was delighted with this discovery. For me, a phenomenon is not a scientific fact if one is obliged to accept it purely and simply as an accident distinctly seen, clearly controlled, but which has come about one knows not how, and which is not repeated one knows not why.

And that was just the case with all the experiments in mental suggestion hitherto known, even with those cited in the first two chapters, and which so astonished me. Mr. D. divined several letters, and even whole words, one after another, under pretty stringent conditions. But what annoyed me was that after a series of amazing successes, there were other series in which the transmission seemed absolutely in default. And yet the subject kept on divining, and divined amiss, wholly amiss. Why? I could not tell; but this inconstancy of the phenomenon discredited in my eyes results the most astonishing. This all the more that on some occasions I succeeded in mentally representing to myself the object with great

distinctness. For example, I represent to myself a *lamp*, and I almost see it flaring before the eyes of my imagination.

"It is a *book*," says the subject. Seeing that I do not confirm this conjecture, "No," says he, "it is a cigar."

Is not that enough to disconcert a skeptic, particularly one but little prepossessed?

Well, I now understood this unevenness, this inconstancy of phenomena : Direct mental suggestion is possible only in one state, and that a transition state between two others. Though I was able to fix that state for a few moments, by graduating the sleep almost at will, that was not possible to do in the waking state, wherein each moment brings *change*, without which, as Bain very well says, there is no consciousness, and wherein this change, as such, is not appreciable for the subject. Thus it sometimes happened that Mr. D. would say to me: "I feel well disposed to-day." Yet the experiments would be unsuccessful, while on another day they would proceed far better, despite his untoward presentiments.

All was now comparatively clear to me; we must regard thought-transference as a sort of *audition*.

One does not hear who is deaf; one does not hear when there is too much noise; one does not hear when one is absorbed in thought.

One is deaf to a transference of thought when one sleeps so soundly that the brain does not perform its functions. How, think you, can a subject sunk in *profound paralytic aideia* obey your thought if he cannot even hear the living voice? He is deaf. In vain will you shout into his ear, *a fortiori* in vain will you whisper to him from a distance. Hence mental suggestions are still more difficult in this state of 'profound aideia than in the waking state, and therefore those who think that all that is needed in order to make one amenable to their mental action is to put one into the magnetic sleep, are mistaken.

One does not hear when there is too much noise, and a *hypnotized* subject will not "hear" your thought because he is at the mercy of everybody; because he has too many strong and different sensations; because his attention is not directed solely to you. Consequently, even though you were to make him hyperæsthetic in every possible way by fixing the gaze on a shining object, or other inanimate object, you will not make him easily sensitive to exceedingly slight *personal* influences, such as thought-action.

One does not hear when one's mind is occupied by other thoughts, because the one action excludes the other. One that is talking hears badly. The dreams of *active somnambulism* being more vivid than those of normal sleep and being nearly always "spoken" dreams, are more opposed to delicate perception than is the waking state itself. Consequently, it is useless to attempt direct mental suggestion with a somnambule that is talking with vivacity, or who is carrying out any

somnambule project whatsoever; he will not hear you. His attention is not null, as in an hypnotized subject; but what is worse for your purpose, it is turned in another direction. Hence, despite the favorable appearances—for he can always hear you, his magnetizer—the state of *strongly active polyideia* is no better for experimental purposes than that of paralytic aideia.

Then, as regards the intermediate states: Some subjects who are capable of presenting these two opposite states—aideia and polyideia—do not pass directly, or at least may not pass directly, from the one into the other. They tarry for a longer or a shorter time in the *monoideic* phase. You have before you no longer an inertia, a complete paralysis of the brain; neither have you a reasoning activity more or less like that of the waking state; but you have to do with a brain that concentrates all its functional action, and that cannot but concentrate it, upon a single idea standing alone and dominant. It is dominant, not being counterbalanced by any other thought. It is hallucinational for the same reason and through the vivacity, the physiological vitality, of a brain that has just rested itself better than usually (aideia), and which asks only a chance to work. Hence you need but little to set it a-going. A nothing moves it, a nothing controls.

That is the moment for suggestions. Mental suggestions? Yes and no! This state is still far more complex than it seems to be. The monoideic state, in the first place, may be two-fold—*active* or *passive*.

When active, it approaches polyideism while remaining what it is. It is akin to it by a very great preponderance of one idea *associated with a few others that are very faint*. This is the state of *somnambule monomania*. The subordinate ideas belong to the real world, the dominant one to imagination. Consequently the subject cannot make his way so well amid the surroundings of actual life as can an active somnambule proper, who reflects, perceives, shuns obstacles, and performs a difficult task. But if he sees (imperfectly) any object, his dream may easily persuade him to believe it a book, a lantern, or a bird, and then he will do a certain number of acts meet to such vision.

This state, the state of spontaneous hallucination, is no more favorable to thought-transference than is active polyideism, whereof it is only a lower grade as regards lucidity, but more advanced and more isolated as regards liveliness of sensations.

Passive monoideism, on the other hand, comes nearer to aideia, just because of its character of passivity, inertia. The vividness of sensations is the same. But *they can no longer arise of their own accord*; they must be suggested, and they are suggested with the utmost ease. Whatever you say is law to the subject. He is under obligation to divine as you bid him, and the divination is done, not by reflection, but by unconscious, imperceptible associations which deceive you,

which appear and disappear almost before their task is done. For this state is, so to speak, still more monoideic than the preceding one. The faint, accessory ideas are almost entirely wanting. And it is always a state of tension, even violent tension, like the other, with this difference, that the tension of active monoideism comes into play of itself, while the tension of passive monoideism always awaits an external stimulus however slight—a breath, a hint, a nothing. Bain would say that it is an “involuntary energy” requiring only an impulsion to show itself.

Is this the phase for mental suggestions? Almost! Anyway, mental suggestions *always act* in this phase, that is to say, you have only to concentrate your thought strongly and the subject will perceive it. There will be first a corrugation of the eyebrows, an expression of attention in the countenance, an agitation of the members, and at last a doing of your will, or a beginning of doing it. One thing, however, may mar the experiment: if your action is too lively in the beginning, or if it is too vividly (albeit indistinctly) perceived by the subject, it will have upon him an awakening influence—awakening in the relative meaning of the word, viz., the subject, though he executes your mental order, and because of the same, will pass too quickly into a state of sleep a little less deep, into *active monoideism*, and then will be all eagerness to execute your mental order without having grasped it fairly; he will seek you, will run after you, and will even “insensibilize” himself¹ by this involuntarily suggested monomania. Or else he will pass into a state of sleep still less profound, more tranquil, and at the same time more lucid, a state of *active polyideism*; he will begin to divine, to guess by his own reflection what he can no longer perceive passively, and then he will be capable of doing other things than you have ordered. Finally—and this happens seldomer, but does happen with subjects that are too sensitive—the mental impulse you give him produces first excitation, after the manner of narcotics, and then puts him to sleep; and the subject, after making a beginning of carrying out the order, lapses into complete aideia. Thus this state does not afford us the best guaranty of success; for that we must seek a little deeper.

The true moment for mental suggestion is *the state betwixt aideia and passive monoideism*.

But if that is so, and if our experiment has a better chance here than in outright passive monoideism, the cause is simply that it has more time at its command, and that one usually makes too great an effort in beginning the mental action—a thing helpful this side the threshold of aideia, while beyond that it is not safe. Could we be certain which stage we had before us, we should have only to conform

¹ *S' insensibilisera* / that is, *will make himself insensible* [to your further action].
—Translator.

to its requirements; we would act with some forcefulness in *aideia* (to awaken the brain), a little more gently in *monoideia* (not to awaken it too much), and we should have free scope up to the very limits of both states. In any case the brain should be "regulated;" it should be regulated for *nascent monoideia*. Permit me to illustrate by a comparison with the telephone.

A telephone, unless it is well regulated, does not reproduce distinctly speech at a distance. But in telephony, as in neurology, all is relative. A telephone is well regulated when the vibrating disk is very nigh, but not too nigh, the magnetic core of the coil; you may then shout pretty loud without impairing the distinctness of the sounds transmitted. On the contrary, the louder you shout the better they hear at the other station. And they would hear better still, comparatively, were the disk still nigher the core, almost touching; but then, in speaking too loud there is danger of the disk sticking to the magnet and of almost complete failure to transmit. *Medium regulation bordering on maximum* is what practice requires, herein differing slightly from theory.

But how "regulate" a somnambule? Ah, that is the question! Fortunately, it is not much more difficult in hypnology than is that other question in telephony; only here as there the instrument must be *regulable*.

Subjects there are who will not be controlled in this respect; they can be employed for other purposes, or with them one has to be content with a hurried mental action, as has been done hitherto. But we must also eschew subjects that are too obedient and already trained—subjects worked by turning a crank, so to speak. But again one must learn how to bring about the degree of slumber that is needed. The first seances, however, must have for their one end purely passive observation of the effect produced by your action, *in order to learn what kind of a subject you have*. You shall spend hours, if needful, waiting for the subject to awake of his own accord, unless he asks to be awakened sooner. In subjects that are specially susceptible of sleep—for some there are with whom you can make all the physical experiments, but not the psychical—you will produce two principal phases, namely, the *deep sleep*, which vanishes by degrees, and the *lucid sleep*, or somnambulism proper. What you need is an intermediate state. The subject must not be allowed to become too much awake and to regain his spontaneous activity, nor is he to be put in too deep a sleep, for then he will not hear you. The best means to obtain this graduation is by *magnetic passes*, so-called, up-and-down and crosswise, for the depth of the slumber usually increases with the number of those, and lessens with the number of these. By making two, three, four passes right before the subject (without contact) you obtain a little less or a little more of sleep, and sometimes

one is able to graduate at will the intermediate phases just mentioned. Should such graduation by passes be impossible, you will have difficulty in obtaining that result by any other means. And above all one must be careful not to employ different means for the different phases, for so one establishes an artificial ideorganic association, a bad habit that will disorganize the subject.

It is understood that I do not enter here upon a discussion of the action of the passes. One may suppose that they exercise a physical action, or one purely suggestive : that is of no importance for the end in view. I simply mention the oldest and best known process, which gives the most constant and most beneficial results as regards the subject (certain hypnotic processes are harmful) and which serves best to graduate the sleep at will whenever graduation is possible.

Once master of your subject, you have only to avail yourself of the moment when *he hears you and does not yet give answer well.*

Do not mistake difficulty of speaking, caused by a contracture of the voice-muscles, for an aphasic difficulty, *i. e.*, one of purely cerebral origin. The latter is what you require.

We will enter on some further details when we state the conclusions of our study.

CHAPTER IV.

EXPERIMENTS AT HAVRE.

IN the month of November, 1885, Mr. Paul Janet, of the Institute, read to the Society of Physiological Psychology a communication from his nephew, Mr. Peter Janet, professor of philosophy in the Lyceum at Havre, entitled "Upon Some Phenomena of Somnambulism." This title, prudently vague, veiled some quite extraordinary revelations. The subject was a series of experiments, made by Messrs. Gibert and Janet, that seemed to prove not only mental suggestion in general but also mental suggestion from a distance of some kilometers, and unbeknown to the subject.

That I followed the reading of this communication with interest was matter of course: everybody did the same, not without a good measure of incredulity. Mr. Janet abstained entirely from theorizing; he simply stated the facts, and left them to be believed or not. The communication, listened to in silence, was passed in silence, save that a few exceptions, of a very general character, were taken by our President, Mr. Charcot. Positively there was no ground for argument, but one might examine the facts. Having decided to do this, I took the first favorable opportunity to carry out my purpose.

True, I had already made many experiments in mental suggestion,

and on that point I no longer had any doubt : I must needs surrender to evidence. But the facts recounted by Messrs. Janet and Gibert presented quite another character. These gentlemen carried out no experiments like those we have been observing in the case of Mrs. D. in the waking state and of Mrs. M. in the state of sleep ; they tried, but without success ; whereas they did attain success under more extraordinary conditions, giving mental suggestions to be carried out much later, and endorming their subject at a distance.

To me this seemed noteworthy. I wished, first of all, to verify this latter phenomenon, recognizing its importance for a theory of suggestion and for the problem of magnetism in general. It was evident that such verification would be the death of the exclusive theory of contemporary hypnotism, which was boasting itself to be the legitimate successor of animal magnetism, deceased, and destined henceforward to take a very modest place alongside its predecessor. On the other hand, should Messrs. Gibert and Janet have been duped by any illusion, we must once again retrace our steps to see if even suggestion from afar be not due to some presently incomprehensible exaltation of the perceiving mind, and not to thought-transference in the true sense of the word.

The subject of these experiments was Mrs. B., a countrywoman of Normandy, 50 years old, in good health, honest, very timid, intelligent, but quite uneducated (she cannot even write and can hardly read). She is of robust, sturdy constitution ; when young was hysterical, but was cured by an unknown magnetizer. Since, only in somnambulism do some traces of hysteria appear, when she is crossed. In the normal state, the hysteria has disappeared, but the hypnotic sensibility that served as its ground persists, as usual. Mrs. B., ever since childhood, has been subject to natural somnambulism, in which she recounts the singular hallucinations she experiences. The somnambulism recurs more frequently of late. The woman has a husband and children, who enjoy good health. Several physicians have, it seems, wished to experiment with her, but she has always rejected their propositions. Only at the request of Mr. Gibert did she consent to spend a little time in Havre. She is endormed very easily : one need but take her hand, grasping it gently for a few moments, *intending to endorm her* ; otherwise there is no result. After a longer or shorter time—2 to 5 minutes, *according to the person that puts her asleep*—her look becomes vague, the eyelids quiver with slight motions that often are very rapid, till the eyeball hides itself behind the lids. At the same time the chest rises laboredly : the subject is evidently ill at ease. Very often a shiver agitates the body for an instant, then she gives a deep sigh and throws herself backward, plunged in deep sleep.

Hypnoscopic exp.: anæsthesia, *general* contracture almost instantaneous, *deep sleep*.

I reached Havre August 21, and found Messrs. Gibert and Janet so convinced of the reality of the action at a distance that they willingly assented to the minute precautions suggested to them by me so that I might be able to test the phenomenon.

Mr. F. Myers and Dr. Myers (members of the London Society for Psychical Research), Mr. Marillier (of the *Société de Psychologie Physiologique*), and myself, formed a sort of commission, and the details of all the experiments were arranged by us with common accord.

The precautions we observed in experimenting were as follows :

1. The precise hour for the action at a distance was fixed by lot.
2. It was not made known to Mr. Gibert till a few minutes before it arrived, and forthwith the members of the commission went to the pavilion.
3. Neither the subject, nor any occupant of the pavilion,¹ distant nearly a kilometer, knew the precise hour, or even the kind of experiment that was about to take place.

4. To avoid involuntary suggestion, neither we nor any of those gentlemen entered the pavilion except to verify the sleep.

First Experiment.—Dr. Gibert must endorm the subject from his office, 51 St. Quentin Street, and mentally order her to go out into the street. Action begins 5:50 P. M. Probable time of executing the order, 6:05.

At 6 o'clock precisely we reach No. 5 Ferme Street, where the pavilion is, but we stand aloof, so that no one might suspect our presence. We wait a quarter of an hour in vain; the subject does not come down into the street. Consequently the experiment was a failure in that respect.

We enter the pavilion, ringing the bell at the garden gate, and go up to the first floor, but find no one there.

Two of us go down to the kitchen, on pretext of inquiring whether Mr. Gibert has yet arrived, and find the subject sitting motionless but *awake*. We pass to a chamber on the first floor, and there talk about the experiment, which we regard as abortive. A few minutes thereafter the subject enters the parlor (opposite to the room we were in), and there we find her reclining on an easy chair in *lethargy*. That, it seems, is always the case when she is endormed by Mr. Gibert. Dr. Gibert is at this moment making his professional calls, and cannot join us.

The subject makes answer to questions put by Mr. Janet, who of late has been endorming her more often than Mr. Gibert.

Mrs. B., in somnambulism, tells of how toward six o'clock she felt ill at ease, and was about to go to sleep when a ring of the bell awakened her, and she took refuge in the kitchen; how thereafter she

¹ *Pavillon* : the house at which the subject lodged.

was unable to overcome the drowsiness, and so went up to the parlor. "Twas Mr. Gibert played me that trick," she added; "you torment me; I don't want folks to endorm me without giving me notice!"

We profit by the somnambulism to make some experiments, which the subject interrupts continually, asking "Where is Mr. Gibert? Where is he? I must go and look for him." She tries to get away from us and go into the street. We hold her back.

After an hour we withdraw, and Mr. Janet awakens her. She recollects nothing, but she has headache, and at evening we go away; she is all the time restless, falls of her own accord into somnambulism, and goes down into the garden seeking Mr. Gibert. They hold her back with difficulty, and send for Mr. Gibert, who comes and quiets her.

Despite these unfavorable conditions, another experiment was arranged, to come off at 12:15 that night. Mrs. B. was sure to be then in her natural sleep.

Second experiment.—"From a distance to make Mrs. B. pass from her natural sleep into somnambulism and go find Mr. Gibert in his office in St. Quentin Street."

The success of this experiment, even according to those gentlemen, was hardly probable. Besides, this was the first time they ever tried to act during the subject's natural sleep. So it failed; the somnambule did not come down stairs; and, as we did not wish to disturb the inmates of the house, we did not go in to see whether there were any indications of action. So much at least is certain, that Mrs. B. did not leave her chamber. The only difference noticed in her behavior on this day as compared with other days was, that instead of rising very early as her custom was, she slept till after ten o'clock, and she got up with a headache. She went down to the kitchen and set herself to work, but, the headache continuing, she went again up to her chamber toward noon.

Then came the *third experiment*. Mr. Gibert was to endorm Mrs. B. from his own house at 10 minutes before 12 o'clock, exerting mental action during 10 minutes. Mrs. B. was to be endormed and to remain in the parlor. At 12.07 we reach the pavilion without ringing the bell, and taking care to make no noise. Mrs. B. is still in her chamber. So as not to influence her by our presence, we send the cook to her to ask if she is coming down to breakfast.

Mrs. B. is walking briskly up and down the room. "I am in a queer way," says she to the cook; "I don't know what ails me. I am trembling; but I will go down all the same."

She did not come down till 10 minutes afterwards. We watch her from a distance. She is not quite endormed, but neither is she in her normal state. She seems not to see what is going on around her nor

to know what she wishes to do. She enters one room and then another ; a minute later she falls into *lethargy*.

The same questions, the same answers. "Again it is Mr. Gibert that plays this trick upon me. But I have made you wait (smiling). *I have had time to dip my hands in water*, and that kept me up for some time. But where is Mr. Gibert? Why does he not come? Why torment me so? I must go and look for him (applying both hands to her forehead). No; he does not want me to go in search of him (fretfully). Why doesn't he wish me to go?"

Sundry experiments are made, in the course of which I remove her headache.

Mrs. B. recognized all the persons present by touching their thumb, and particularly by scratching lightly the thumb nail. There was no getting an explanation of this trick, which to her seemed quite natural. She would not even tell us how she hit upon it. I can only say that in this way she perceives really the personality, the physical state, sometimes also the mental state of people. After touching my thumb she declared that I should have great influence over her and that I might easily control her. "For example, I should not dare to say *no* to you," said she; and so on.

Thenceforward she seems really to feel my presence, and to be subject to a sort of attraction for me. Wishing to test the reality of this influence, I concentrate my thought and order her to give me her hand; suddenly I see her start; she grows excited, leans toward me, and holds her hand out to me. Thrice I made this experiment with the same success while she was in a state more or less proximate to *monoidism*. When she was in the *aideic state* the effect was null, retarded, or incomplete; she became agitated, but did not execute the mental order.

In *active somnambulism* the experiments were sometimes successful, if I took care to select a moment of inaction. In acting while she talked animatedly with Mr. Janet or another person, or when she was absorbed in her own thoughts, I obtained no result, absolutely none. I had also occasion to notice that too great concentration of my own thought rather marred the result of the experiment; it upset her, producing spasms and general tension, interfering with the exactness of the transmission. On the other hand, a thought formulated with precision but, so to speak, in passing and without special mental pressure, produced an action whenever the subject was amenable to those mysterious influences. Here are two experiments made under this condition of tension, which were unsuccessful.

I was at the lower end of the room, hid behind Mr. Janet, and I ordered the somnambule to kneel. She manifested strong agitation, seemed to be looking for me, her eyes opened and remained open without intelligence. The state in which she was at this moment was

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the state produced by D^r when he makes his subject follow him. It was thus a state of fascination, with a noteworthy difference, however. The state of fascination is a monoideic state. It is passive, eminently passive, when you hold the subject fast with your eye, operating upon him as you please. This state is sensitive to visual influences, to the imitation of gestures, etc., when it is calm. If, on the contrary, the subject, drawn by your eye, follows you, the calm disappears, a sort of fever seizes him, his thought is too absorbed, too tense in one direction to allow new influences to act; the subject follows you madly, he is infuriated by the slightest obstacle, and then he can do nothing but follow your eye with blind obstinacy. That is not passive monoideia, it is active monoideia, *hypnotic monomania*.

Acting mentally at a distance and unseen by the subject, I produced a state like this, but more agitated and less clearly defined, less fixed, the fixity of gaze being lacking as a support to the monomaniacal tendency of the subject. She was, therefore, upset, agitated, attracted, but indistinctly, and her mental state, which asked only to be dominated by one thought, was at the same time too much on the strain to grasp it. It was an almost aideic fever, because of the mingling of indistinct ideas.

The subject began with rising to her feet; then I thought I noticed a bending of her body as though she were about to kneel; but this movement ceased and Mrs. B. straightened herself and for a moment remained standing. Then I changed my thought and ordered her to come to me and then to go upon her knees before the easy chair. She stopped tottering toward the chair. At that moment I pronounced mentally the words "Kneel!" "On the floor!" The latter expression caused me some uneasiness and I regretted it. "Perhaps she will fall to the floor and hurt herself," I thought; so I began anew my mental order, "Kneel!"

At that instant Mrs. B. fell backward in lethargy into the arms of M. L.

Another experiment, suggested by Mr. Frederic Myers, also failed, the woman was to take in her hands a cushion placed to the left of her on the couch. This experiment took a good deal of time, as the different states of the subject succeeded one another rapidly. At times there was no action; at times the feverish monomaniacal agitation interfered with the distinctness of the transmission. Mrs. B. stretched her arms forth toward the cushion, but did not take hold of it. At last she rose, went to the end of the couch where the cushion was, paying no attention to it, and ~~went down upon her knees~~—thus executing the order she had failed to execute when given before, ~~and which I was not then thinking of~~.

But, I must add, there is no certainty that in this case we have a retarded mental perception of the first order: for, inasmuch as I

considered the first experiment a failure, I said to the gentlemen present that I had chosen that injunction rather than another, expressly because it had not succeeded definitely with my former subject. At that moment the somnambule was in lethargic aideia and could not hear us; but we must never trust this hypnotic deafness, for though it is absolute as regards reflex action, it may be that it does not exclude latent, unconscious audition, and this may manifest itself in a subsequent state. I may even say, I think, that the habitual overlooking of this fact by experimenters does a great deal toward making their observations inexact.

Finally, a third trial, in which she was ordered to give her right hand while I was on her left, was only in part successful. There was a motion of the right arm in the direction of me, but the hand was not given.

It is to be remarked that all these experiments were made by me without my touching the subject, who never was magnetized by me. She was at this moment under the influence of Mr Gibert (absent), and of Mr. Janet, who awakened her at length, not without difficulty.

Fourth Experiment.—On account of the patient's fatigue, it was about decided to suspend experiment till the morrow; but not being satisfied with the first three, I urged Mr. Gibert to allow an immediate repetition of the second, which had failed (Cagliostro's experiment—endorming the subject from a distance and making her come to him across the city).

It was half-past 8 in the evening. Mr. Gibert consented. The precise time was chosen by lot. The mental action was to begin 5 minutes before 9 and to continue till 9.10. At that moment there was no one in the pavilion, besides the subject, but the cook, and she did not expect that anything was to be done by us. No one went to the pavilion. Profiting by this absence, the two women went to the parlor, and amused themselves with playing on the piano.

We reached the neighborhood of the pavilion past 9 o'clock. Silence. The street was deserted. Without making the least noise, we broke up into two parties to watch the house from a distance.

At 9.25 I saw a shadow appear at the garden gate. It was she. I hid in a corner to listen without being observed. But I heard nothing. The somnambule, after waiting a minute at the gate, went back into the garden. (At this moment Mr. Gibert was no longer acting; by dint of concentrating his thought he had a sort of syncope or stupor, lasting till 9.35.)

At 9.30 the somnambule appeared again at the gate, and this time sprang into the street unhesitating. She hurried along like one who is late, but who must positively reach his destination. The other gentlemen, who were on her route, had no time to notify us—Dr.

Myers and me ; but, hearing rapid footfalls, we followed the somnambule, who noticed nothing around her ; or, at least, did not recognize us. Reaching Du Bard Street she began to stagger, halted a moment, and came near falling. Suddenly she started forward again at a rapid pace. It was now 9.35. (At this moment Mr. Gibert, come to himself, began the action again.) The somnambule hurried on regardless of surroundings.

In ten minutes we were quite near Mr. Gibert's house, when he, thinking the experiment had missed, and wondering because he did not see us back again, steps out to meet us. He comes across the somnambule, who keeps her eyes still closed. She does not recognize him. Absorbed in her hypnotic monomania, she rushes to the staircase, followed by us all. Mr. Gibert wanted to enter his office, but I take him by the hand and lead him to a room opposite. The somnambule, highly wrought up, looks for him everywhere, brushing by us, but not noticing anything. She enters the office, feels of the furniture, repeating in a tone of distress, "Where is he? Where is Mr. Gibert?"

Meanwhile the magnetizer was seated, making not the least motion. The subject enters the room, almost touches him as she passes, but in her excitement fails to recognize him. Again she rushes through other rooms. Then the thought occurred to Mr. Gibert to draw her to him mentally, and in consequence of that act of will, or by simple coincidence, she retraced her steps and seized him by the hands.

That moment an insane joy took possession of her. She springs upon the sofa, claps her hands like a child, and cries, "There you are! There you are at last! How happy I am!"

Then she repeats to us her impressions. The two women, Mrs. B. and the cook, were amusing themselves in the parlor, playing and singing, profiting by the absence of the lady of the house. Then, toward 9 o'clock—9 o'clock, she said, *lacking two or three minutes*,¹ "being seated on the sofa, I felt a drowsiness coming upon me." "It was you," said she, addressing Mr. Gibert, "that did that to me. I knew these gentlemen were waiting in the street. 'Well,' said I to myself, 'let them wait; I have enough of this nonsense.' But I could not make a long resistance, and I ran like a crazy woman."

She was able to name the streets she had traversed, but she had "met nobody."

The evening was a very interesting one. After enjoying for a good half-hour the presence of her "dear Mr. Gibert," and felt of the thumb of Mr. Janet, whom she also "loves dearly," she suddenly exclaimed: "And that gentleman—the other gentleman—what's his name? Where is he?" She reaches forth her hand in the direction of me, groping in the air. I give her my hand. She examines my

¹ But according to the cook the parlor clock pointed to 9.15.

thumb after her own fashion, recognizes me¹ with satisfaction, but continues the examination. "What, then, is your name? Mr. Oko—Goro—I don't know." I repeat, mentally, my name, but she cannot yet speak it.

"You are—you are not English. [The first day she took me for Mr. Frederic Myers, which proves that she did not *see* persons.] You are from Paris—but you are not French; you have come only for France—you are from—— What is the name of your country? Bre—— No! Po—— Poland, isn't that it? You endorm many, a good many people. Why? I don't want you to endorm so many people. Listen! What do you do in Paris? [She applies her fingers to her forehead.] A factory, you make ape—apa— how do you call it? Apparatus, isn't that it?"

"What are those apparatus used for?" asked Mr. Gibert.

I thought of telephones, but what came into her mind was the hypnoscope (she had seen one in my hands, but she has never seen a telephone).

"Oh, it works so." Here she imitated general contracture—a reminiscence of yesterday's experiment.

We pass to other experiments, but the somnambule's thoughts are elsewhere, she is preoccupied about me. In vain do I hold my tongue, withdraw, hide; she seems always drawn toward me, and wants to go and find me. She grows angry at Mr. Janet, and says he (mentally) forbids her to keep her thoughts fixed upon me.

Seeing this strange influence, Mr. Gibert proposed that I should take his place, judging that I could obtain results still more remarkable. But I decline. "It is a sympathy," I said, "a somnambule's passion such as we sometimes see, rather than a really stronger influence. I do not know the subject well enough, and, besides, in delicate experiments it is not well to multiply influences. I trust more your conversance with the subject than my personal power. Finally, inasmuch as it is a question of facts that I have not yet verified, and which I am trying to study, I prefer to retain my independence as an observer."

Consequently, Mr. Gibert was requested to continue the experiments and in particular to attempt *transmission of sensations*.

To the end that the attraction that my presence seemed to exert upon Mrs. B. might not become a hindrance, I asked Mr. Janet to suggest to her the thought that I was gone away.

"Mr. Ochorowicz is gone; he will not return. I forbid you to think of him!"

This order, several times repeated in view of the opposition made by the subject, secured for us a quiet time for nearly an hour. During that time she spoke no more of me and I was able to stand quite near her and to watch the experiments.

¹ That is, recognizes that I am the one whose power she lauded.

MENTAL SUGGESTION.

It was necessary to select the favorable moment for the transmission of sensations, for that phenomenon, as well as mental suggestion in general, succeeds only in an intermediate state betwixt *aideic* *lability* and regular *monoideism*. I was glad to be able to verify in this remarkable subject the same *physiological conditions* which were first formulated by me before the Society of Physiological Psychology, January 25, 1886, and which were based upon a detailed study of the phenomena presented by Mrs. M.

Verification of the state needful for transmission was made in the following manner: Mr. Gibert drank slowly alongside Mrs. M. a glass of water. Immediately she exhibited the movements of swallowing.

After this preparatory trial, Mr. Gibert, followed by Mr. Marillier, retired to a remote apartment. On the threshold of the chamber I whisper in the ear of Mr. Marillier: "Pinch his right hand."

Two minutes after, Mrs. B. manifests the signs of suffering sharp pain. Both her hands, but the right in particular, are in a quiver. "Don't," she cried. "Don't do that, wretch."

The second experiment was proposed in writing: "Puncture the middle of his forehead."

In the subject, general agitation, less marked in the arms. The somnambule raises her hands toward her forehead, complaining of the hurt they are causing her, and continually repeating: "You wretch! Don't do that! Wretch!" Her agitation continued for a minute after the return of the two gentlemen.

Then came the last experiment—one that I had never witnessed before—namely, mentally to order an act that was not to be performed till the following morning. At the stroke of 11 o'clock Mrs. B. *was to go to the parlor*, take up a photograph album that lay on the table, open it and examine the portraits. (This order was proposed in writing by Mr. Frederic Myers.)

To communicate the order mentally, Mr. Gibert seized Mrs. B.'s hands and applied his forehead to her's. I stood quite close to them: he made no movement of the lips. He merely attracted the subject's attention by saying, "Listen, Léonie!"

At the moment of transmission Mrs. B.'s countenance assumed a peculiar expression; one would say she was listening with all her powers of attention. But at the same time it was plain that Mr. Gibert did not act auditive sensations for her,¹ for while still retaining this expression she began to be agitated, to writhe in strong convulsions. There was a true paroxysm of hysterepilepsy, with grinding of the teeth, clonic movements and contractures. After barely two minutes the communication was at an end, and Mrs. B. grew quiet little by little, giving no sign that she knew what had passed.

¹ *N'agissait pas pour elle des sensations auditives.*

Messrs. Gibert and Janet even assured me that she could not tell what was asked of her, *and that orders given in this way to be carried out in the sleep itself had never succeeded.* Hence, it appears that this is a transmission eminently *unconscious*, and that the subject's unconscious requires a certain time to crystallize, so to speak, the impressions received, and to excite the corresponding muscles.

This phenomenon is not an isolated one in psychology. It sometimes happens to one, as he lies abed, that the thought of getting up comes to him, but without sufficient force to overcome his indolence. This thought returns once or twice without result. Then, while his mind is occupied with quite other things, he feels himself raised suddenly, as by a stranger force, and is up with a bound without making up his mind to act.

So, with regard to waking at a set hour. I must take the train very early. I know that there will be somebody to awaken me, and so my consciousness may sleep tranquilly. But the unconscious has received communication of this decision, though the Me did not at all count on the unconscious. So the unconscious watches, is so wakeful, calculates time so exactly, that at the approach of the fixed hour it rouses us and recalls the Me to consciousness.

The following morning, at 5 minutes before 11 o'clock, Mr. Marillier and I were in the garden. The clock struck 11, and we saw Mrs. B. coming down-stairs from her chamber. She enters the parlor, looking for something. She touches several objects, without taking them in hand. She opens the wall closet, and shuts it again. Mr. Janet comes and bids her good morning; she makes reply, and then goes on with her indeterminate task, while walking up and down the parlor. Mr. Janet returns to us, and proposes to us to endorm the subject from a distance, thinking the experiment has failed. I object, saying that Mrs. B., not being quite in her normal state, might fall asleep of her own accord, and that we ought to wait and see what she would do. And all agreed that I was in the right; for, a few minutes later, at 11.30, Mrs. B. takes up an album, then another, opens it, sits on the sofa; and, now visibly quieted, begins to turn the photographs over. As she told us afterward, she was looking for the portrait of Mr. Gibert. "Why?" she was asked. "Because it gives me pleasure to see it." (That photograph had been taken out after it was found that once she was endormed spontaneously while looking at it.)

We go to the parlor and find Mrs. B. still engaged in thumbing the album, but she was in a state of *active somnambulism*. She did not this time say it was Mr. Gibert that endormed her; she did not even know she was endormed.

Naturally we profited by the occasion to make a few experiments. She again touched the thumbs of all present and recognized us easily. Mr. Janet asked her to continue her revelation about me. She

repeated her remarks of the other day : "He has a good deal—I don't know how to speak it—well, he has that which is needed to endorm." "A good deal of will-power?" asked Mr. Janet. "Yes, yes, a will-power—but I don't know how to call it—he thinks well. When one means to endorm me he must think well—else it torments me—some one wants to endorm me and thinks of something else ; that annoys me. He has—I don't know—but I should not dare, for instance, to say nay to him—Oh, there ! He could make me walk—make me walk into the sea."

"You want to leave us, then—Mr. Gibert and me?" "No ; you are mine." "Then forget him !" "I will not." But at last she gives way, and we are able to proceed with the experiments.

I have forgotten to say that after the seance at Mr. Gibert's she was taken home in a carriage and awakened on her arrival, so that she retained no recollection of her night-wandering. While on the way home she said to the gentlemen that were with her that *I had something in my pocket which attracted* (the hypnoscope). Wishing to verify the fact I passed the magnet to Dr. Myers, who, according to the somnambule, had no influence over her. He put it in his pocket ; while on the other side Mr. Frederic Myers, who was equally indifferent for Mrs. B., had another magnet.

Almost instantly Mrs. B. stretched forth her arms, attracted in two opposite directions. This attraction ceased in the state of active somnambulism, and then reappeared in one of the phases of lethargy that I was unable to define.

But little by little the order to forget me was blotted out of the subject's mind, and she showed again an attraction toward me, though now I had not the hypnoscope in my pocket. She rose twice and wanted to follow me. I went into the garden so as not to spoil the experiment, and Mr. Janet was obliged to repeat the order to forget. Finally, toward 2 o'clock, in the street I stopped the gentlemen to say to them this :

"You know I came to Havre mainly to verify the fact, till then unknown to me, of somnambulism at a distance. Now, the experiments we have made do not convince me. They are acceptable as regards action at a distance, but then they may also be explained by involuntary suggestions. In the first experiment Mrs. B. was not endormed till after she had seen that we were come. The second failed entirely ; true, it was performed under exceptional difficulties, but at all events it proves nothing. The third seems conclusive ; the subject came across town endormed. But for me there is a serious doubt. Mr. Gibert began the action at 5 minutes before 9 o'clock, whereas according to the cook Mrs. B. seemed to be already endormed 15 minutes before 9. I have ascertained that my watch keeps time with the clock in the parlor, and Mr. Gibert's is regulated according

to mine. Consequently we may suppose that Mrs. B. fell asleep of her own accord some minutes before Mr. Gibert began to act. Afterward she came, it is true, but I saw her at the garden gate, and it may be that she perceived one of us and that this circumstance suggested to her the thought of going out a few minutes after. In short, if we reject the testimony of the somnambule herself, certain doubts arise. To be absolutely convinced, I request Mr. Janet to endorm the subject *now*. The conditions are as perfect as can be. I noticed Mrs. B. from a distance and am perfectly certain that she is in her normal state, without any tendency to spontaneous somnambulism. No one is at this moment expecting an experiment. "Will you try it?"

It was cruel on my part, for we were all both tired and hungry; but I did not wish to go away without a clear conscience, and without being able to subscribe to the report that Mr. Marillier was to make to the Society of Physiological Psychology. Mr. Janet replied that he never had tried to act in the public street, that it would be impossible for him sufficiently to concentrate his thought, and that, on the whole, he preferred that the experiment should be made by Mr. Gibert. But at last he consented, provided he were permitted to act from his own house, *i. e.*, from a much greater distance, but where he would have the necessary quietude. I accepted the conditions, and it was agreed that we should first go to lunch together, to fix the exact time, and then try the experiment.

The matter was arranged as follows: I asked Mr. Marillier to go to the pavilion and watch Mrs. B. He did not act upon her, and so his presence could not have a disturbing effect. He was an *habitué* of the house, and therefore his presence could not awaken any suspicion. He did not know the precise time of the experiment, consequently he could not by his behavior influence the subject at the given moment. The precise time, fixed by lot after the departure of Mr. Marillier, was 4.30.

"We have still a good hour before us, but I'll not let you slip from me," said I to Mr. Janet, laughing. So we went together to take a cup of coffee, and then to have a stroll on the beach; at last, we went back to Mr. Janet's house, No. 3 Robert Alley. I kept up a lively conversation all the time with Mr. Janet, to keep him from thinking of Mrs. B., and so that there might be no excuses if by chance Mrs. B. should be endormed *before* the hour.

At 4.30 I withdrew to the little garden plot of his house, to give him entire freedom of action.

He sat in his armchair, his head between his hands, and concentrated his will so as to order Mrs. B., about half a mile away, to fall into somnambulism. This mental action lasted 18 minutes.

At 4.48 I enter Mr. Janet's study. He puts on his hat, and we go out to join the Messrs. Myers and proceed to the pavilion. Before

entering I asked Dr. Myers to go upstairs alone and call Mr. Marillier down. The latter said he had seen nothing. "All that I can certify," he declared, "is that since my arrival nobody entered the pavilion. As for Mrs. B., she probably is busy sewing in the parlor, but I did not enter the parlor for fear of exciting her suspicions." Before going in, I begged Mr. Janet to permit me to put the questions to Mrs. B. in case we should find her endormed.

Then we enter without ringing, as noiselessly as possible, and notice, through the door of the parlor, which was ajar, Mrs. B. engaged in sewing, but *in active somnambulism*. She did not hear us. *She answered only the questions put by Mr. Janet.*

"Well! You are tormenting me again! Do I look like a fool? It is you that are playing this trick upon me!"

"Perhaps it is Mr. Gibert."

"It is not Mr. Gibert at all, 'tis you."

"When did you fall asleep?"

"Just at half-past four."

"Did you look at the watch?"

"What need to look at the watch? I tell you it was half-past four."

I compared Mrs. B.'s watch with mine. It was 3' 30" slow; consequently, if she noted the time correctly, *the effect was produced from a distance in about 4 minutes after the commencement of the action.*

"Tell us what you have been doing since we left."

She then told us that first she went down to the kitchen for lunch, that she talked awhile with the cook, and then went up to the first floor to dress; that at last she took up her sewing and suddenly found herself paralysed, so that when the bell rang (on Mr. Myers entering) she was unable to rise.

She did not speak of Mr. Gibert this time as she had done always before.

Another point worthy of notice is that, as these gentlemen assured me, when Mr. Gibert endorms her from a distance, she is always *found in lethargy*; when Mr. Janet is the operator she falls into a less profound *somnambulic* state. The cook confirmed the somnambule's statements.

"Now, then, are you satisfied?" asked Mr. Janet, addressing me.

"Yes; this time the experiment is clear. One thing only I regret—that Mr. Marillier could see nothing. Thereupon we proceed to experiment.

From the beginning of our seances she had shown a certain repulsion toward Mr. Marillier, a purely physical repulsion against being touched by him; yet she would talk with him and show no sign of dislike. We ask the reason of this. She examines his thumb; then, letting go his hand, she says: "He makes me ill. Oh, not me—but—that does not concern you." Mr. Janet insists. Again she seizes

Mr. Marillier's thumb, touches his chest, then her own, with an expression of pain, and makes answer: "I do not wish—that does not concern you." All that can be got from her is that he is ill.

Mr. Marillier took me aside, and admitted that he had an affection of the heart, and but a few days before had suffered a good deal from it. The fact is mentioned in his study on Hallucinations.

With her habitual vivacity—habitual only when she is in the state of active somnambulism—Mrs. B. passes to other matters, amuses herself like a child, touches the hands of those present, always in the same way and with the eyes shut.

While she was holding a lively conversation with Mr. Janet, I made an experiment in mental action. It was without result. At that moment there was hyperæsthesia of the sense of smell, for a cigarette mouthpiece, held some twenty inches away, produced coughing and discomfort.

As she showed such marked impressionableness with regard to me, and as she believed I had left the house, I wished to find out whether she could recognize an object belonging to me. So I remove my cravat and pass it secretly to Mr. Janet by the hand of Mr. Marillier. Being at the moment occupied with other questions, Mr. Janet laid the cravat on the table. A few seconds afterward, the somnambule rose of her own accord, took the cravat, went straight to me, dropped the cravat into my lap, and went back to her place, acting throughout like an automaton. Was this an instance of thought-action on my part? At all events Mrs. B. did not recognize me; she merely carried out my thought, which had not been formulated as a mental order, and this she did mechanically, as though not knowing what she did. But the somnambule, despite her apparent inability to see, might have noticed my not having on the cravat. I therefore decided to make the same experiment over again with another object, and for this purpose I chose a bit of black ribbon that no one had seen me wear: this, too, I passed to Mr. Janet by the hand of a third person, not a word being spoken. Mr. Janet held the ribbon in his closed hand. Suddenly the somnambule opened his hand, took the ribbon, and as soon as she had touched it danced with joy like a child, saying: "He is there! He is there! He is not gone!" Then she asked for a piece of paper, and it was given to her. She wrapped the ribbon in this and held it out in the direction of me, to give it to me. I did not stir, and she grew impatient. Mr. Janet tried to take the little parcel from her, and her irritation increased. Then I took up a broad-brimmed hat, and with that concealed my hand and Mr. Janet's. The instant the parcel touched my hand, Mrs. B. smiled and tried to give it back to me; but when she found Mr. Janet's hand she withdrew the parcel, and showed signs of displeasure. After many experiments of this kind her agitation increased, and she had a real paroxysm of

hysteria, which Mr. Janet tried to quiet by applying his forehead to hers. (It seems that ovarian pressure has not this effect upon Mrs. B., who, I repeat, presents no symptom of hysteria in her normal state.)

To elucidate the question of her discernment of objects, I proposed to Mr. Janet to take three similar leaves of paper, touched by three different persons and marked by them. It was done, and an effort made to pass the papers to Mrs. B. But she objected strenuously, struggled, and would not touch them. She brushed them aside with her handkerchief, and was not quieted till she saw them on the floor. Then she threw the handkerchief on the sofa, and started when she chanced to touch it. When the three sheets of paper were by force laid in her lap, she struggled, threw herself back, and fell into lethargy. The experiment had therefore to be given up.

I was obliged to return to Paris, but one more experiment in endorming from a distance took place, under the direction of Mr. F. Myers. The details were communicated to me by Mr. Janet, as follows:

"On Saturday, after you left, nothing of real interest occurred, save an experiment in somnambulism produced from a distance, under precisely the same conditions as on the day before. The Messrs. Myers had me to lunch with them, and suddenly requested me to endorm Léonie at an hour they had agreed upon—a little before 3 o'clock. I thought upon it for a little less time than the previous day—about ten minutes—and we went forthwith to the pavilion, without waiting. Léonie was asleep over her work, as on the preceding day; she had been endormed just about 3:15. All that is known with precision is that she had gone upstairs to her work hardly a quarter of an hour before (at 2:45). It is further to be noted that no one had endormed her since the preceding day, and that I had not seen her that morning.

"Léonie said it was I that had endormed her. It seems that at that moment she had an hallucination—such, at least, is Mr. Myers's opinion. She kept saying that *she saw me endorm her*.

"During the sleep we did little more than repeat what you have seen already. . . . The sleep was disturbed by a storm which caused very violent paroxysms (*crises*) such as I had not seen before.

"The Messrs. Myers left Saturday evening. I endormed the subject once more Sunday morning, but I did it all alone in continuation of my researches.

"As soon as I shall see Léonie in her second state, which is for us the true one, I will convey to her your compliments.

"I am, etc.,

"P. JANET.

"Havre, May 4, 1886."

I left Havre with a profound emotion. I had at last witnessed the extraordinary phenomenon of action from a distance, which upsets all the opinions currently received. I summoned up my recollections, I questioned my notes a hundred times, to make sure of the reality of

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